

ORS 2021 Annual Meeting All Access – February 12-16, 2021

Disclosure Index- PODIUM AND POSTER PRESENTERS

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8 - I chair the ORS Annual Meeting Program Committee and I serve on the Editorial Review Boards of JOR, JBMR and PLoS ONE

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Nothing to disclose

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3b - I am a paid consultant for DiscGenics, Inc. in Salt Lake City, UT

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1- Royalties received for the Vega total knee system and the CoreHip Femoral Total Hip stem from Aesculap Inc; 2- Pacira Biosciences; 5 - Clinical Trial PI for Iovera Myoscience Inc Co-PI DOD grant VALOR Study Research support in kind resources from Stryker Inc, Aesculap inc NIH grant support from NIAMS R34; 7A - Royalties received for the Vega total knee system and the CoreHip Femoral Total Hip stem from Aesculap Inc; 7B - Royalties from Elsevier; 8 - Journal of Arthroplasty-Editorial Board; Journal of Long Term Effects of Medical Implants-Editorial Board; Orthopaedic Clinics of North America -Associate Editor; Journal of Orthopaedic Research-Editorial Review Board; 9 - Executive Committee ASTM International F04 Committee on Medical and Surgical Devices and Materials; Sub Committee Officer F04-39 Clinical Trials ASTM International; Campbell Foundation Board of Trustees

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3A - Spouse is an employee of Taiga Biotechnologies, Inc. (not related to orthopedics); 4 – Spouse – Pfizer stock; 9 – ORS member Program Committee

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Beck, Christopher A*Disclosed no conflict of interest.*

Beck, Christopher A.*Disclosed no conflict of interest.*

Beck, James*Disclosed no conflict of interest.*

Beck, James Peter*Disclosed no conflict of interest.*

Beck, Peter*Disclosed no conflict of interest.*

Beckman, Lorne*Disclosed no conflict of interest.*

Bedair, Hany*Disclosed no conflict of interest.*

Bedard, Nicholas A3B: DePuy; 8: Journal of Arthroplasty; 9: American Association of Hip and Knee Surgeons.

Bedard, Nicolas A3B: DePuy; 8: Journal of Arthroplasty; 9: American Association of Hip and Knee Surgeons.

Bedi, Meena*Disclosed no conflict of interest.*

Bedingfield, Sean K*Disclosed no conflict of interest.*

Begum, Laila*Disclosed no conflict of interest.*

Behrens, Phillip*Disclosed no conflict of interest.*

Beier, Frank*Disclosed no conflict of interest.*

Bejarano-Pineda, Lorena*Disclosed no conflict of interest.*

Bekki, Hirofumi*Disclosed no conflict of interest.*

Bell, Kevin M*Disclosed no conflict of interest.*

Bell, Rebecca*Disclosed no conflict of interest.*

Bell, Richard D*Disclosed no conflict of interest.*

Beltran, Luis S*Disclosed no conflict of interest.*

Benage, Lindsay G.....*Disclosed no conflict of interest.*

Bendigo, Justin.....3A: Biorez.

Benes, Gregory*Disclosed no conflict of interest.*

Beneveia, Joseph3A: Co-founder of CreOsso, a company focused on bone healing adjuncts.

Benevenia, Joseph*Disclosed no conflict of interest.*

Beninatto, Riccardo*Disclosed no conflict of interest.*

Benn, Andreas*Disclosed no conflict of interest.*

Benneker, Lorin M*Disclosed no conflict of interest.*

Benneker, Lorin M.*Disclosed no conflict of interest.*

Bensadoun, Julian*Disclosed no conflict of interest.*

Bensusan, Jay.....*Disclosed no conflict of interest.*

Berger, Andrew.....*Disclosed no conflict of interest.*

Bergeron, Stephane*Disclosed no conflict of interest.*

Bergholt, Mads S.....*Disclosed no conflict of interest.*

Bergholt, Mads S.....*Disclosed no conflict of interest.*

Bergman, Rachel F*Disclosed no conflict of interest.*

Berke, Ian M*Disclosed no conflict of interest.*

Berken, David*Disclosed no conflict of interest.*

Bernard, Fabrice*Disclosed no conflict of interest.*

Bernas, Geoffrey.....*Disclosed no conflict of interest.*

Berns, Ellis.....*Disclosed no conflict of interest.*

Berns, Ellis M*Disclosed no conflict of interest.*

Bernstein, Zachary*Disclosed no conflict of interest.*

Bernthal, Nicholas M*Disclosed no conflict of interest.*

Bernthal, Nicholas M.3B: Daiichi Sankyo Inc., Zimmer Biomet, ONKOS Surgical, Bone Support, Deciphera; 5: Trellis Bioscience, Biocomposites.

Bertels, Josh.....*Disclosed no conflict of interest.*

Bertels, Joshua.....*Disclosed no conflict of interest.*

Bertrand, Fabrice3A: Blue Ortho.

Berube, Erin*Disclosed no conflict of interest.*

Besler, Bryce A*Disclosed no conflict of interest.*

Besler, Bryce A.*Disclosed no conflict of interest.*

Besschetnova, Tatiana3A: Radius Health Inc; 4: Radius Health Inc.

Best, Benjamin*Disclosed no conflict of interest.*

Best, Katherine*Disclosed no conflict of interest.*

Best, Thomas M*Disclosed no conflict of interest.*

Betech, Alex*Disclosed no conflict of interest.*

Betsch, Kevin*Disclosed no conflict of interest.*

Beveridge, Jillian E.*Disclosed no conflict of interest.*

Bevins, Nicholas*Disclosed no conflict of interest.*

Bey, Michael J*Disclosed no conflict of interest.*

Beynnon, Bruce D*Disclosed no conflict of interest.*

Beynnon, Bruce D8: Journal of Orthopaedic Research.

Beynnon, Bruce D.*Disclosed no conflict of interest.*

Bezold, Will*Disclosed no conflict of interest.*

Bhadouria, Neharika*Disclosed no conflict of interest.*

Bharadwaj, Upasana*Disclosed no conflict of interest.*

Bhatia, Sanjeev*Disclosed no conflict of interest.*

Bhattacharjee, Arjak*Disclosed no conflict of interest.*

Bhattacharjee, Sarah*Disclosed no conflict of interest.*

Bhattacharyya, Subha3A: mtf biologics; 6: ConMed.

Bhattaram, Pallavi*Disclosed no conflict of interest.*

Bhave, Sampada*Disclosed no conflict of interest.*

Bhimani, Rohan*Disclosed no conflict of interest.*

Bhogal, Sumail*Disclosed no conflict of interest.*

Bhowmik-Stoker, Manoshi3A: Stryker; 4: Stryker.

Bhowmik-Stoker, Manoshi3A: Stryker.

Bi, Yufei*Disclosed no conflict of interest.*

Bice, Ryan*Disclosed no conflict of interest.*

Bicknell, Ryan T.....3B: DePuy Synthes, Zimmer Biomet; 5: Zimmer Biomet, ConMed Linvatec.

Biermann, J. Sybil.....*Disclosed no conflict of interest.*

Bijukumar, Divya.....*Disclosed no conflict of interest.*

Billi, Fabrizio*Disclosed no conflict of interest.*

Billings, Caroline*Disclosed no conflict of interest.*

Biltz, Nicole*Disclosed no conflict of interest.*

Binch, Abbie.....*Disclosed no conflict of interest.*

Binch, Abbie LA.....*Disclosed no conflict of interest.*

Bingham, Justin.....3A: DiscGenics; 4: DiscGenics.

Birchmeier, Thomas*Disclosed no conflict of interest.*

Bird, Alyssa*Disclosed no conflict of interest.*

Birk, David E.....*Disclosed no conflict of interest.*

Birman, Victor.....*Disclosed no conflict of interest.*

Bisazza, Katie T*Disclosed no conflict of interest.*

Bischoff, Jeffrey E.....3A: Zimmer Biomet; 4: Zimmer Biomet.

Bisson, Leslie.....*Disclosed no conflict of interest.*

Bisson, Leslie J.*Disclosed no conflict of interest.*

Bisson, Rian*Disclosed no conflict of interest.*

Bitar, Rogerio.....*Disclosed no conflict of interest.*

Bitter, Thom.....*Disclosed no conflict of interest.*

Blache, Ulrich.....*Disclosed no conflict of interest.*

Black, Marianne S4: Arbutus Medical.

Black, Marianne S4: Arbutus Medical Inc.

Black, Rebecca*Disclosed no conflict of interest.*

Blair, Matthew.....*Disclosed no conflict of interest.*

Blake, Ryan*Disclosed no conflict of interest.*

Blaker, Carina*Disclosed no conflict of interest.*

Blaker, Carina L.....*Disclosed no conflict of interest.*

Blank, Alan T.....1: exparel/pacira; 2: Onkos Surgical; 5: Swim Across America Cancer Research Grant.

Blank, Jonathan L.....*Disclosed no conflict of interest.*

Blank, Jonathon*Disclosed no conflict of interest.*

Blank, Kenneth*Disclosed no conflict of interest.*

Blatter, Iris3A: Zimmer GMBH; 4: Zimmer Biomet.

Blomquist, Matthew B.....*Disclosed no conflict of interest.*

Bloomfield, Riley A*Disclosed no conflict of interest.*

Boden, Allison.....*Disclosed no conflict of interest.*

Boelter, Kaitlyn.....*Disclosed no conflict of interest.*

Boerckel, Joel D.*Disclosed no conflict of interest.*

Bogosian, Claire*Disclosed no conflict of interest.*

Bohner, Ariel.....*Disclosed no conflict of interest.*

Boinpally, Neha.....*Disclosed no conflict of interest.*

Bois, Aaron*Disclosed no conflict of interest.*

Boiwka, Alexander V.....*Disclosed no conflict of interest.*

Bolam, Scott M*Disclosed no conflict of interest.*

Bolia-Kavouklis, Ioanna.....*Disclosed no conflict of interest.*

Bolte, Julia*Disclosed no conflict of interest.*

Bomar, James*Disclosed no conflict of interest.*

Bonassar, Lawrence4: 3DBio Corp.

Bonassar, Lawrence4: 3DBio.

Bonassar, Lawrence J.....3B: 3DBio Corp.

Bonassar, Lawrence J4: 3D Bio Corp.

Bondy, Jedediah.....*Disclosed no conflict of interest.*

Bonnet, Cleo S.....*Disclosed no conflict of interest.*

Bonnheim, Noah B......*Disclosed no conflict of interest.*

Bonthius, Daniel*Disclosed no conflict of interest.*

Boone, Kyle.....*Disclosed no conflict of interest.*

Boorman, Sophie*Disclosed no conflict of interest.*

Boorman-Padgett, James.....*Disclosed no conflict of interest.*

Borjali, Alireza.....*Disclosed no conflict of interest.*

Born, Christopher4: BI Medical.

Born, Christopher4: BI Medical LLC.

Born, Christopher3B: Stryker; 3C: BI Medical, Biointraface; 4: BI Medical, Biointraface; 7A: Stryker.

Born, Christopher T.....3B: Stryker Trauma.

Borowik, Agnieszka.....*Disclosed no conflict of interest.*

Borrero, Camilo.....*Disclosed no conflict of interest.*

Borst, Johanna*Disclosed no conflict of interest.*

Borukhov, Ilya.....3A: Stryker; 4: Stryker.

Bosch, Patrick P*Disclosed no conflict of interest.*

Bose, Susmita*Disclosed no conflict of interest.*

Bostrom, Mathias1: Smith & Nephew; 3B: Smith & Nephew; 5: Smith & Nephew; 8: HSS Journal, Journal of Orthopedic Research; 9: American Austrian Foundation, Hip Society.

Bostrom, Mathias3B: Smith and Nephew; 5: Smith and Nephew; 7A: Smith and Nephew; 8: HSS Journal, Journal of Orthopaedic Research; 9: American Austrian Foundation, Hip Society.

Bostrom, Mathias P3B: Smith & Nephew; 5: Smith & Nephew; 7A: Smith & Nephew.

Bostrom, Mathias P3B: Smith & Nephew.

Bostrom, Mathias P.G......3B: Smith & Nephew.

Bostrom, Mathias PG.....3B: Smith & Nephew.

Bostrom, Matthias.....1: Smith and Nephew; 6: Smith and Nephew, NIH, Ines Mandl Research Foundation.

Bou-Akl, Therese.....*Disclosed no conflict of interest.*

Bouchareychas, Laura*Disclosed no conflict of interest.*

Bourguine, Paul*Disclosed no conflict of interest.*

Bouz, Gabriel J*Disclosed no conflict of interest.*

Bovonratwet, Patawut.....*Disclosed no conflict of interest.*

Bowen, Edward.....*Disclosed no conflict of interest.*

Bowen, Stephen N*Disclosed no conflict of interest.*

Bowles, Robby*Disclosed no conflict of interest.*

Bowles, Robby D.....*Disclosed no conflict of interest.*

Bowman, Fred.....3A: MicroPort Orthopedics.

Bowman, Fred.....3A: Fred Bowman.

Box, Kasheena*Disclosed no conflict of interest.*

Boyan, Barbara2: Medtronic/Titan Spine; 3B: Medtronic/Titan Spine; 3C: Spineology Inc, Institut Straumann AG; 4: SpherIngenics Inc; 5: Medtronic/Titan Spine, Spineology Inc; 6: Medtronic/TitanSpine, Institut Straumann AG, Musculoskeletal Transplant Foundation; 9: SpherIngenic Inc.

Boyan, Barbara D.....2: Medtronic/TitanSpine; 3B: Medtronic/TitanSpine; 3C: Spineology Inc, Institut Straumann AG; 4: Spheringenics Inc; 5: Medtronic/TitanSpine, Spineology Inc; 6: Medtronic/TitanSpine, Institut Straumann AG, MTF Biologics; 9: Spheringenics Inc.

Boyce, Brendan F*Disclosed no conflict of interest.*

Boyd, Jonathan*Disclosed no conflict of interest.*

Boyd, Steven K.....*Disclosed no conflict of interest.*

Boyd, Steven K.....*Disclosed no conflict of interest.*

Boyer, Philip*Disclosed no conflict of interest.*

Boyle, K Keely*Disclosed no conflict of interest.*

Boys, Alexander J.....*Disclosed no conflict of interest.*

Bozynski, Chantelle.....*Disclosed no conflict of interest.*

Bozynski, Chantelle C.....*Disclosed no conflict of interest.*

Bradley, Elizabeth*Disclosed no conflict of interest.*

Bradley, Elizabeth W.....*Disclosed no conflict of interest.*

Brady, Alex.....*Disclosed no conflict of interest.*

Brady, Alex W.....*Disclosed no conflict of interest.*

Braender-Carr, Olivia*Disclosed no conflict of interest.*

Bragdon, Beth.....*Disclosed no conflict of interest.*

Brahmachary, Priyanka.....*Disclosed no conflict of interest.*

Braithwaite, Gavin.....3A: Cambridge Polymer Group; 4: Cambridge Polymer Group.

Bral, Elexis*Disclosed no conflict of interest.*

Braly, Houston*Disclosed no conflict of interest.*

Branche, Katherine*Disclosed no conflict of interest.*

Brantner, Collin.....*Disclosed no conflict of interest.*

Brashear, Sarah E.....*Disclosed no conflict of interest.*

Breakwell, Lee*Disclosed no conflict of interest.*

Bredbenner, Todd L*Disclosed no conflict of interest.*

Brenner, Rolf E*Disclosed no conflict of interest.*

Brett, Owens D.*Disclosed no conflict of interest.*

Brewer, Erik*3B: ReGelTec Inc; 4: ReGelTec Inc; 5: ReGelTec Inc; 6: ReGelTec Inc.*

Brisson, Becky K.*Disclosed no conflict of interest.*

Britton, Joshua*Disclosed no conflict of interest.*

Broberg, Jordan*Disclosed no conflict of interest.*

Broberg, Jordan S.*Disclosed no conflict of interest.*

Brock, Marissa*Disclosed no conflict of interest.*

Brockbank, Kelvin*3A: PAID EMPLOYEE of Tissue Testing Technologies LLC.*

Brockett, Claire L.*Disclosed no conflict of interest.*

Broderick, Kristen*Disclosed no conflict of interest.*

Brodeur, Peter*Disclosed no conflict of interest.*

Brokken, Matthew T.*Disclosed no conflict of interest.*

Brolinson, P Gunnar*Disclosed no conflict of interest.*

Bronstone, Amy*Disclosed no conflict of interest.*

Brooks, Jacob*Disclosed no conflict of interest.*

Brooks, Margaret*Disclosed no conflict of interest.*

Brooks, Myya*Disclosed no conflict of interest.*

Brophy, Robert*3B: Arthrex, Sanofi.*

Brophy, Robert H*8: AJSM; 9: AAOS, AOA, AOSSM.*

Brothers, Kimberly M.*Disclosed no conflict of interest.*

Brothers, Kimberly M.*Disclosed no conflict of interest.*

Brown, Alexander E.*Disclosed no conflict of interest.*

Brown, Brigid*Disclosed no conflict of interest.*

Brown, Edward*Disclosed no conflict of interest.*

Brown, Emma*Disclosed no conflict of interest.*

Brown, Kelsey*Disclosed no conflict of interest.*

Brown, Lauryn G*Disclosed no conflict of interest.*

Brown, Michael Ethan.....*Disclosed no conflict of interest.*

Brown, Roshawn.....*Disclosed no conflict of interest.*

Brown, Scot*Disclosed no conflict of interest.*

Brown, Stephen HM.....*Disclosed no conflict of interest.*

Brown, Symone.....*Disclosed no conflict of interest.*

Brown, Tammy*Disclosed no conflict of interest.*

Brown, Timothy S8: American Journal of Orthopedics, Journal of Arthroplasty; 9: American Association of Hip and Knee Surgeons.

Brown, Timothy S8: Journal of Arthroplasty, American Journal of Orthopedics; 9: American Association of Hip and Knee Surgeons.

Brown, Timothy S8: Journal of Arthroplasty; 9: American Association of Hip and Knee Surgeons.

Brown, Tyler N.....*Disclosed no conflict of interest.*

Brown, Zachary.....3A: ReGelTec Inc; 6: ReGelTec Inc.

Browne, Kevin D*Disclosed no conflict of interest.*

Browne, Shane.....*Disclosed no conflict of interest.*

Broz, Kaitlyn S.....*Disclosed no conflict of interest.*

Brozovich, Ava A.....*Disclosed no conflict of interest.*

Brubacher, Jacob*Disclosed no conflict of interest.*

Brusalis, Christopher M*Disclosed no conflict of interest.*

Bryant, John T.....*Disclosed no conflict of interest.*

Bryniarski, Anna.....*Disclosed no conflict of interest.*

Bryniarski, Anna R.....*Disclosed no conflict of interest.*

Buchanan, Thomas S.....*Disclosed no conflict of interest.*

Buchanan, Thomas S.....*Disclosed no conflict of interest.*

Buckley, Mark.....*Disclosed no conflict of interest.*

Buckley, Richard*Disclosed no conflict of interest.*

Buckley, Simon C.....*Disclosed no conflict of interest.*

Bucovsky, Mariana.....*Disclosed no conflict of interest.*

Budden, Theodore*Disclosed no conflict of interest.*

Bue, Mats.....*Disclosed no conflict of interest.*

Buettmann, Evan*Disclosed no conflict of interest.*

Buettmann, Evan G*Disclosed no conflict of interest.*

Buettner, Garry R.....*Disclosed no conflict of interest.*

Bugbee, William D.3B: JRF Ortho, Arthrex.

Bull, Anthony MJ.....*Disclosed no conflict of interest.*

Bullen, Jennifer*Disclosed no conflict of interest.*

Bumgardner, Joel D.....1: Bionova Medical Inc.; 5: Austin Medical Ventures, Triad Life Sciences;
7B: Elsevier; 8: Journal of Biomedical Materials Research Part B; 9: Society for Biomaterials.

Bumgardner, Joel D.1: Bionova Medical Inc; 5: Austin Medical Ventures, Triad Life Sciences;
7B: Elsevier; 8: Journal of Biomedical Materials Research Part B.; 9: Society for Biomaterials.

Bunnell, Bruce.....*Disclosed no conflict of interest.*

Bunnell, Bruce A*Disclosed no conflict of interest.*

Bunnell, Bruce A.*Disclosed no conflict of interest.*

Burdick, Jason*Disclosed no conflict of interest.*

Burdick, Jason A.....*Disclosed no conflict of interest.*

Burge, Alissa J.*Disclosed no conflict of interest.*

Burger-Van Der Walt, Evalina ...*Disclosed no conflict of interest.*

Burkhead, Katie3A: DePuy Synthes.

Burkus, John Kenneth3B: VIVEX Biologics Inc.

Burns, David M.4: Halterix.

Bursac, Zoran*Disclosed no conflict of interest.*

Burt, Kevin*Disclosed no conflict of interest.*

Burt, Kevin G.....*Disclosed no conflict of interest.*

Burton, Bryce.....*Disclosed no conflict of interest.*

Burton, William.....*Disclosed no conflict of interest.*

Bush, Ashley*Disclosed no conflict of interest.*

Bushelow, Michael.....3A: DePuy Synthes; 4: Johnson & Johnson.

Butler, Samuel C.*Disclosed no conflict of interest.*

Butsenko, Dmitriy*Disclosed no conflict of interest.*

Buttgereit, Frank.....*Disclosed no conflict of interest.*

Buys, Willem.....*Disclosed no conflict of interest.*

Bydon, Mohamad*Disclosed no conflict of interest.*

Bylski-Austrow, Donita I9: Scoliosis Research Society, Orthopaedic Research Society.

Byrapogu, Venkata*Disclosed no conflict of interest.*

Byrapogu, Venkata Kalyan C*Disclosed no conflict of interest.*

Byrne, Kevin.....*Disclosed no conflict of interest.*

Byvaltsev, Vadim A*Disclosed no conflict of interest.*

Caballero, José de E*Disclosed no conflict of interest.*

Caceres, Manuel D*Disclosed no conflict of interest.*

Cafri, Guy3A: Johnson & Johnson; 4: ABBVIE, BRISTOL-MYERS SQUIBB, GILEAD SCIENCES, GLAXOSMITHKLINE.

Cahill, Patrick J*Disclosed no conflict of interest.*

Cai, Lei*Disclosed no conflict of interest.*

Cai, Xiaoyu*Disclosed no conflict of interest.*

Cai, Zhuochang*Disclosed no conflict of interest.*

Caicedo, Marco S.3A: Orthopedic Analysis LLC.

Cain, Jarrett D.3B: CareStream Health, Kinoss Medical; 8: Journal of Foot & Ankle Surgery.

Caird, Michelle S.*Disclosed no conflict of interest.*

Caisley, Allyson B*Disclosed no conflict of interest.*

Caldwell, Christopher.....*Disclosed no conflict of interest.*

Caldwell, Lauren*Disclosed no conflict of interest.*

Call, Jarrod*Disclosed no conflict of interest.*

Callon, Karen E.....*Disclosed no conflict of interest.*

Cameron, Emily G*Disclosed no conflict of interest.*

Cameron, James.....*Disclosed no conflict of interest.*

Caminha, Ieda M.V.*Disclosed no conflict of interest.*

Cammisa, Frank*Disclosed no conflict of interest.*

Cammisa, Frank P*Disclosed no conflict of interest.*

Campagne, Mikayla*Disclosed no conflict of interest.*

Campbell, Lia3A: PAID EMPLOYEE of Tissue Testing Technologies LLC.

Can, Nejat Yigit*Disclosed no conflict of interest.*

Cannada, Lisa K.....*Disclosed no conflict of interest.*

Cannon, Paul.....*Disclosed no conflict of interest.*

Canton, Stephen*Disclosed no conflict of interest.*

Cao, Can.....*Disclosed no conflict of interest.*

Cao, Wentao*Disclosed no conflict of interest.*

Cao, Xu.....*Disclosed no conflict of interest.*

Capar, Serdar*Disclosed no conflict of interest.*

Capin, Jacob J.....*Disclosed no conflict of interest.*

Capogna, Elizabeth*Disclosed no conflict of interest.*

Cappellini, Alex*Disclosed no conflict of interest.*

Cappellini, Alex J.....*Disclosed no conflict of interest.*

Carballo, Camila B.....*Disclosed no conflict of interest.*

Carbone, Andrew.....*Disclosed no conflict of interest.*

Carder, Seth*Disclosed no conflict of interest.*

Cardona-Ramirez, Sebastian*Disclosed no conflict of interest.*

Carender, Christopher N8: Journal of Arthroplasty, Iowa Orthopedic Journal.

Carender, Christopher N8: Journal of Arthroplasty.

Carey, James L.....3C: Vericel.

Carey, James L.....3C: Vericel; 5: Vericel; 8: AJSM.

Carli, Alberto.....3B: KCl.

Carli, Alberto V3B: KCl.

CarlLee, Tyler*Disclosed no conflict of interest.*

Carlson, Cathy S*Disclosed no conflict of interest.*

Carlson, Cathy S.....*Disclosed no conflict of interest.*

Carlson, Greg*Disclosed no conflict of interest.*

Carlson, Jaclyn A*Disclosed no conflict of interest.*

Carniel, Thiago Andre*Disclosed no conflict of interest.*

Carpenter, Dana.....5: Applied Medical Technology, Inc.

Carriero, Alessandra*Disclosed no conflict of interest.*

Carrino, John.....*Disclosed no conflict of interest.*

Carroll, Colin*Disclosed no conflict of interest.*

Carroll, Kaitlin M*Disclosed no conflict of interest.*

Carroll, Sean K*Disclosed no conflict of interest.*

Carswell, Tess*Disclosed no conflict of interest.*

Carter, Andrew*3B: Biorez.*

Carter, Jennifer*Disclosed no conflict of interest.*

Casagranda, Bethany*Disclosed no conflict of interest.*

Casal, Margret*Disclosed no conflict of interest.*

Cascia, Nicole*Disclosed no conflict of interest.*

Casden, Michael*Disclosed no conflict of interest.*

Casebier, Justin C.*Disclosed no conflict of interest.*

Castellon, Alexis*Disclosed no conflict of interest.*

Castile, Ryan*Disclosed no conflict of interest.*

Castile, Ryan M*Disclosed no conflict of interest.*

Castillo, Francine*Disclosed no conflict of interest.*

Castillo, Wilfrido Javier*Disclosed no conflict of interest.*

Catelli, Danilo S*Disclosed no conflict of interest.*

Cates, Harold*1: Smith & Nephew royalties; 2: Smith & Nephew; 3B: Smith & Nephew; 4: Smith & Nephew, ZimmerBiomet.*

Cauble, Meagan A.*Disclosed no conflict of interest.*

Causey, Greg C*3B: Applied Medical Technology, Inc.*

Cederna, Paul S*Disclosed no conflict of interest.*

Cegla, Frederic*Disclosed no conflict of interest.*

Cercone, Marta*Disclosed no conflict of interest.*

Cesarovic, Nikola*Disclosed no conflict of interest.*

Cevallos, Nicolas*Disclosed no conflict of interest.*

Cha, Thomas*3B: Bio2, GE Healthcare, K2M.; 5: K2M, Nuvasive.*

Cha, Thomas*3B: Bio2, GE Healthcare, K2M; 5: K2M, Nuvasive.*

Cha, Thomas*3B: Bio 2, GE Healthcare, K2M; 5: K2M, Nuvasive.*

Chae, Sudong*Disclosed no conflict of interest.*

Chahine, Nadeen*Disclosed no conflict of interest.*

Chahine, Nadeen O*Disclosed no conflict of interest.*

Chahine, Nadeen O.*Disclosed no conflict of interest.*

Chahla, Jorge5: CONMED Linvatec, OSSUR and Smith & Nephew.

Chahla, Jorge3B: Arthrex, Inc, CONMED Linvatec, Ossur, Smith & Nephew; 9: American Orthopaedic Society for Sports Medicine, Arthroscopy Association of North America, International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.

Chahla, Jorge5: Össur, Arthrex, CONMED, and Smith & Nephew.

Chakka, Anish B*Disclosed no conflict of interest.*

Chakraborty, Debabrata*Disclosed no conflict of interest.*

Chalmers, Brian.....*Disclosed no conflict of interest.*

Chamberlain, Aaron.....2: DePuy Synthes Mitek, Arthrex; 3B: DePuy Synthes Mitek; 5: Zimmer Biomet.

Chamberlain, Aaron M......*Disclosed no conflict of interest.*

Chambre, Laura.....*Disclosed no conflict of interest.*

Chan, Calvin*Disclosed no conflict of interest.*

Chan, Calvin K.....*Disclosed no conflict of interest.*

Chan, Kang.....*Disclosed no conflict of interest.*

Chan, Kiara.....*Disclosed no conflict of interest.*

Chan, Kiara M*Disclosed no conflict of interest.*

Chan, Stephen.....*Disclosed no conflict of interest.*

Chan, Yu Kiu Victor*Disclosed no conflict of interest.*

Chancellor, Ann*Disclosed no conflict of interest.*

Chanda, Souptick*Disclosed no conflict of interest.*

Chandran, Uma.....*Disclosed no conflict of interest.*

Chandrasekaran, Ramya*Disclosed no conflict of interest.*

Chang, Douglas*Disclosed no conflict of interest.*

Chang, lou-Ren*Disclosed no conflict of interest.*

Chang, Je-Ken*Disclosed no conflict of interest.*

Chang, Ling-Hua*Disclosed no conflict of interest.*

Chang, Peter S......*Disclosed no conflict of interest.*

Chang, Solomon.....*Disclosed no conflict of interest.*

Chao, Richard.....*Disclosed no conflict of interest.*

Chapman, Graham J.....*Disclosed no conflict of interest.*

Chapman, Ryan M.....*Disclosed no conflict of interest.*

Chapman, Savita3A: MedShape.

Chapple, Andrew*Disclosed no conflict of interest.*

Chapple, Andrew G*Disclosed no conflict of interest.*

Charbonneau, Cherie*Disclosed no conflict of interest.*

Charles, Shaquille*Disclosed no conflict of interest.*

Chase, Kayla L.*Disclosed no conflict of interest.*

Chase, Kevin*Disclosed no conflict of interest.*

Chastain II, Paul*Disclosed no conflict of interest.*

Chatterjee, Monideepa*Disclosed no conflict of interest.*

Chatterji, Rishi*Disclosed no conflict of interest.*

Chatzistavrou, Xanthippi.....*Disclosed no conflict of interest.*

Chaudhari, Abhijit J.....*Disclosed no conflict of interest.*

Chaudhari, Akshay3A: SkopeMR, Inc, Subtle Medical, Chondrometrics GmbH, Image Analysis Group, Edge Analytics, Culvert Engineering; 3B: Subtle Medical, LVIS, Brain Key; 4: Subtle Medical; 5: GE Healthcare.

Chaudhari, Akshay S3A: Skope MR Inc., Subtle Medical, Chondrometrics GmbH, Image Analysis Group, Edge Analytics, Culvert Engineering; 3B: Subtle Medical, LVIS, Brain Key; 4: Subtle Medical; 5: GE Healthcare.

Chaudhuri, Soumilee.....*Disclosed no conflict of interest.*

Chausse, Daniel L*Disclosed no conflict of interest.*

Chauvin, Hannah.....*Disclosed no conflict of interest.*

Chawla, Dipul.....*Disclosed no conflict of interest.*

Checa, Sara*Disclosed no conflict of interest.*

Chee, Ana.....*Disclosed no conflict of interest.*

Chen, Aaron Z.*Disclosed no conflict of interest.*

Chen, Angel.....*Disclosed no conflict of interest.*

Chen, An-min*Disclosed no conflict of interest.*

Chen, Antonia3B: Stryker.

Chen, Changhong.....*Disclosed no conflict of interest.*
Chen, Christopher*Disclosed no conflict of interest.*
Chen, Chung-Hwan*Disclosed no conflict of interest.*
Chen, Daoyun*Disclosed no conflict of interest.*
Chen, David.....*Disclosed no conflict of interest.*
Chen, Elizabeth S.*Disclosed no conflict of interest.*
Chen, Hsin Huei.....*Disclosed no conflict of interest.*
Chen, Jhen-Wei.....*Disclosed no conflict of interest.*
Chen, Ji3A: University of Houston.
Chen, Ji3B: Ji Chen.
Chen, Jie.....*Disclosed no conflict of interest.*
Chen, Junyu*Disclosed no conflict of interest.*
Chen, Keren*Disclosed no conflict of interest.*
Chen, Liang*Disclosed no conflict of interest.*
Chen, Matthew.....*Disclosed no conflict of interest.*
Chen, Meng.....*Disclosed no conflict of interest.*
Chen, Ningrong.....*Disclosed no conflict of interest.*
Chen, Peng.....*Disclosed no conflict of interest.*
Chen, Qian*Disclosed no conflict of interest.*
Chen, Raymond E.....*Disclosed no conflict of interest.*
Chen, Roy J.....*Disclosed no conflict of interest.*
Chen, Shih-Chieh.....*Disclosed no conflict of interest.*
Chen, Stephen R.....*Disclosed no conflict of interest.*
Chen, Stephen R.*Disclosed no conflict of interest.*
Chen, Ting.....*Disclosed no conflict of interest.*
Chen, Tony.....*Disclosed no conflict of interest.*
Chen, Wei Cheng.....*Disclosed no conflict of interest.*
Chen, Weitong*Disclosed no conflict of interest.*
Chen, Xiang.....*Disclosed no conflict of interest.*
Chen, Yicong*Disclosed no conflict of interest.*

Chen, Yinwei.....*Disclosed no conflict of interest.*

Chen, Yumei.....*Disclosed no conflict of interest.*

Chen, Zhen.....3A: PAID EMPLOYEE of Tissue Testing Technologies LLC.

Cheng, Alexandre.....*Disclosed no conflict of interest.*

Cheng, Christina W*Disclosed no conflict of interest.*

Cheng, Haizi*Disclosed no conflict of interest.*

Cheng, Huan*Disclosed no conflict of interest.*

Cheng, Jack Chun-Yiu*Disclosed no conflict of interest.*

Cheng, Jack CY*Disclosed no conflict of interest.*

Cheng, Kai-yuan7A: MicroPort Orthopedic Inc.

Cheng, Mei-Hsin.....*Disclosed no conflict of interest.*

Cheng, Zhiliang*Disclosed no conflict of interest.*

Chenoweth, David*Disclosed no conflict of interest.*

Chenshuang, Li.....*Disclosed no conflict of interest.*

Cherief, Masnsen*Disclosed no conflict of interest.*

Cherif, Hosni*Disclosed no conflict of interest.*

Chesnais, Helene.....*Disclosed no conflict of interest.*

Cheung, Ambrose L.....*Disclosed no conflict of interest.*

Cheung, Carrie*Disclosed no conflict of interest.*

Cheung, Kenneth*Disclosed no conflict of interest.*

Cheung, Wing Hoi*Disclosed no conflict of interest.*

Cheung, Wing-hoi*Disclosed no conflict of interest.*

Chevalier, Jacqueline*Disclosed no conflict of interest.*

Chevrier, Anik4: Ortho Regenerative Technologies Inc.

Chhabra, Avneesh.....*Disclosed no conflict of interest.*

Chi, Ruimin*Disclosed no conflict of interest.*

Chi, Sheng-Wei.....*Disclosed no conflict of interest.*

Chiapparelli, Erika*Disclosed no conflict of interest.*

Chiapparelli, Erika A.....*Disclosed no conflict of interest.*

Chiba, Kazuhiro.....*Disclosed no conflict of interest.*

Chicco, Adam*Disclosed no conflict of interest.*

Chida, Shuya*Disclosed no conflict of interest.*

Chieh Hsu, Yung*Disclosed no conflict of interest.*

Chijimatsu, Ryota.....*Disclosed no conflict of interest.*

Childs, Hannah R.....*Disclosed no conflict of interest.*

Chimento, George.....*Disclosed no conflict of interest.*

Chin, Cynthia.....*Disclosed no conflict of interest.*

Chin, Cynthia T.....*Disclosed no conflict of interest.*

Chin, Joseph.....*Disclosed no conflict of interest.*

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Chionuma, Henry N.....*Disclosed no conflict of interest.*

Chirokikh, Alexander*Disclosed no conflict of interest.*

Chisari, Emanuele*Disclosed no conflict of interest.*

Chiverton, Neil.....*Disclosed no conflict of interest.*

Chlebek, Carolyn.....*Disclosed no conflict of interest.*

Cho, Ho Jung.....*Disclosed no conflict of interest.*

Cho, Samuel K.....*Disclosed no conflict of interest.*

Cho, Sankyun*Disclosed no conflict of interest.*

Choe, Hyonmin*Disclosed no conflict of interest.*

Choi, Aaron.....*Disclosed no conflict of interest.*

Choi, Jae Hyuk.....*Disclosed no conflict of interest.*

Choi, Jae-Young*Disclosed no conflict of interest.*

Choi, Jong Hyun*Disclosed no conflict of interest.*

Choi, Keun Young.....*Disclosed no conflict of interest.*

Choi, Stephen.....*Disclosed no conflict of interest.*

Choi, Yongwon.....*Disclosed no conflict of interest.*

Choi, Yoonjung.....*Disclosed no conflict of interest.*

Choi, Yun-rak*Disclosed no conflict of interest.*

Choma, Nicholas*Disclosed no conflict of interest.*

Choma, Theodore4: Gentis, Inc.; 9: AO Spine NA, North American Spine Society, Scoliosis Research Society.

Choma, Theodore J4: Gentis, Inc.; 9: AO Spine North America, North American Spine Society, Scoliosis Research Society.

Chopra, Ahab*Disclosed no conflict of interest.*

Chou, Liang-Yin*Disclosed no conflict of interest.*

Chou, Ya-Shuan*Disclosed no conflict of interest.*

Choueka, Jack*Disclosed no conflict of interest.*

Chow, Kwoon-ho*Disclosed no conflict of interest.*

Chow, Lyndah*Disclosed no conflict of interest.*

Chow, Simon Kwoon Ho*Disclosed no conflict of interest.*

Chow, Simon Kwoon-ho*Disclosed no conflict of interest.*

Chowdhury, Adiba3A: MTF Biologics; 6: OrthoFix Medical, Inc.

Chowdhury, Naisha*Disclosed no conflict of interest.*

Christ, George*Disclosed no conflict of interest.*

Christensen, Kyle3A: Embody Inc; 4: Embody Inc.

Christiansen, Blaine A*Disclosed no conflict of interest.*

Christolias, George*Disclosed no conflict of interest.*

Christou, Chris*Disclosed no conflict of interest.*

Chu, Alice*Disclosed no conflict of interest.*

Chu, Constance*Disclosed no conflict of interest.*

Chu, Constance R*Disclosed no conflict of interest.*

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Chubinskaya, Susan*Disclosed no conflict of interest.*

Chubinskaya, Susanna5: Jointechlabs, Inc, Novartis Institute for Functional Genomics; 9: President - Orthopaedic Research Society.

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Chung, Rebecca*Disclosed no conflict of interest.*

Cinelli, Paolo*Disclosed no conflict of interest.*

Cisneros, Karla*Disclosed no conflict of interest.*

Clanton, Thomas O1: Arthrex, Inc., Stryker; 2: Arthrex, Inc., Stryker; 3B: Arthrex, Inc., Stryker; 3C: Wright Medical Technology, Inc.; 5: Arthrex, Inc.; 6: Arthrex, Inc., DJO, MLB, Ossur, Siemens, Smith & Nephew, XTRE.

Clapp, Ian M.....*Disclosed no conflict of interest.*

Clark, Andrea*Disclosed no conflict of interest.*

Clark, Daniel.....*Disclosed no conflict of interest.*

Clark, Karen L.....*Disclosed no conflict of interest.*

Clarke, Amelia.....*Disclosed no conflict of interest.*

Clarke, Elizabeth*Disclosed no conflict of interest.*

Clarke, Elizabeth C5: Bone Ligament Tendon.

Clarkson, Samuel*Disclosed no conflict of interest.*

Clary, Chadd.....5: Depuy Synthes.

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Clauw, Daniel.....3C: Pfizer, Forest, Eli Lilly, Pierre Fabre, Cypress Biosciences, Wyeth, UCB, Astra Zeneca, Merck, J & J, Nuvo, Jazz, Abbott, Cerephex, Iroko, Tonix, Theravance, IMC, Zynerba, Samumed, Astellas, Aptinyx.; 5: Pfizer, Cypress Biosciences, Forest, Merck, Nuvo, Cerephex.

Clayton, Ahsia.....*Disclosed no conflict of interest.*

Clayton, Bishir.....*Disclosed no conflict of interest.*

Clayton, Sade W.....*Disclosed no conflict of interest.*

Clemens, Thomas.....8: Editor-in-chief, Bone Research.

Clinton, Kailey.....*Disclosed no conflict of interest.*

Clohisy, John C3B: Microport Orthopedics, Inc., Zimmer; 5: Zimmer; 7A: Microport; 7B: Wolters Kluwer Health-Lippincott Williams & Wilkins.

Clohisy, John C3B: Microport Orthopedics, Inc., Zimmer; 5: Zimmer; 7A: Microport; 7B: Wolters Kluwer Health - Lippincott Williams & Wilkins.

Clohisy, John C.*Disclosed no conflict of interest.*

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Coathup, Melanie*Disclosed no conflict of interest.*

Coathup, Melanie J*Disclosed no conflict of interest.*

Coats-Thomas, Margaret*Disclosed no conflict of interest.*

Cobb, Justin*Disclosed no conflict of interest.*

Cobb, Justin P.3A: Embody; 4: Embody.

Cobelli, Neil J*Disclosed no conflict of interest.*

Coda, Reed.....*Disclosed no conflict of interest.*

Coen, MD, Paul*Disclosed no conflict of interest.*

Coenen, Michael*Disclosed no conflict of interest.*

Coenen, Michael J.....*Disclosed no conflict of interest.*

Coghlan, Ryan.....*Disclosed no conflict of interest.*

Cohen, David.....*3B: SpherIngenics Inc; 5: SpherIngenics Inc; 8: Pre-clinical Research Committee, Orthopaedic Research Society.*

Cohen, Eric M.....*Disclosed no conflict of interest.*

Cohen, Itai*Disclosed no conflict of interest.*

Cohen, Landon E*Disclosed no conflict of interest.*

Cohen, Landone E*Disclosed no conflict of interest.*

Cohen, Samuel A.....*Disclosed no conflict of interest.*

Cohen, Sarah C.....*Disclosed no conflict of interest.*

Cohen-Levy, Wayne*Disclosed no conflict of interest.*

Cohn, Dan*Disclosed no conflict of interest.*

Colak, Ceylan*Disclosed no conflict of interest.*

Colazo, Juan M.....*Disclosed no conflict of interest.*

Colditz, Graham A.....*Disclosed no conflict of interest.*

Cole, Ashley*Disclosed no conflict of interest.*

Cole, Brian*3B: Arthrex, Inc; 4: Bandgrip Inc, Regentis; 5: Aesculap/B.Braun, Arthrex, Inc, Regentis; 7A: Arthrex, Inc; 7B: Athletico, Elsevier Publishing, Smith & Nephew; 8: American Journal of Orthopedics, American Journal of Sports Medicine, Cartilage; 9: Arthroscopy Association of North America.*

Cole, Brian J*1: Arthrex Inc, Operative Techniques in Sports Medicine, Elsevier Publishing; 3B: Arthrex Inc; 4: Bandgrip Inc, Ossio, Regentis; 5: Aesculap/B.Braun, Arthrex Inc, NIH, Regentis; 6: Athletico, JRF Ortho, Operative Techniques in Sports Medicine, Smith&Nephew; 7A: , Arthrex Inc; 7B: , Elsevier, Operative Techniques in Sports Medicine; 8: , American Journal of Orthopedics, AJSM, Cartilage, JSES, JAAOS; 9: , AANA, ICRS.*

Cole, Ross Frederick*Disclosed no conflict of interest.*

Coleman, Brendan*Disclosed no conflict of interest.*

Coleman, Emily*Disclosed no conflict of interest.*

Coleman, Mitchell C.....*Disclosed no conflict of interest.*

Coleman, Rhima.....*Disclosed no conflict of interest.*

Collier, Christopher D.....*Disclosed no conflict of interest.*

Collins, Amber*Disclosed no conflict of interest.*

Collins, Amber T.....*Disclosed no conflict of interest.*

Collins, Caitlyn. J.....*Disclosed no conflict of interest.*

Collins, Jamie E*Disclosed no conflict of interest.*

Collins, Katherine A.....*Disclosed no conflict of interest.*

Collins, Kelsey*Disclosed no conflict of interest.*

Collins, Kelsey H.....*Disclosed no conflict of interest.*

Collins, Kelsey H.....*Disclosed no conflict of interest.*

Collins, Lacey*Disclosed no conflict of interest.*

Collins, Shannon3A: Stryker.

Collins, Simon3A: MatOrtho Ltd.

Colman, Matthew1: Alphatec Spine, Spinal Elements; 2: AO Spine North America; 3B: DePuy, A Johnson & Johnson Company, K2M, Orthofix, Inc; 5: CSRS.

Columbus, Melanie.....*Disclosed no conflict of interest.*

Comer, Brendan.....*Disclosed no conflict of interest.*

Como, Christopher.....*Disclosed no conflict of interest.*

Como, Christopher J.....*Disclosed no conflict of interest.*

Compton, Robert3A: dba Cornerloc; 4: dba Cornerloc.

Compton, Tyler*Disclosed no conflict of interest.*

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Condron, Nolan.....*Disclosed no conflict of interest.*

Cone, Stephanie G*Disclosed no conflict of interest.*

Conley, Caitlin EW.....*Disclosed no conflict of interest.*

Conley, Caitlin E-W9: International Cartilage Regeneration and Joint Preservation Society Patient Registry.

Connaughton, Alexander*Disclosed no conflict of interest.*

Connizzo, Brianne K*Disclosed no conflict of interest.*

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Contag, Christopher4: BioEclipse, EXOForce, PixelGear; 5: Gladiator Pharma; 7A: Stanford Patents licensed to BioEclipse.

Conteh, Etta*Disclosed no conflict of interest.*

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Conway, Sheila*Disclosed no conflict of interest.*

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Cook, Harold A......*Disclosed no conflict of interest.*

Cook, James1: Arthrex, Inc., Musculoskeletal Transplant Foundation, AthleteIQ; 2: Arthrex, Inc.; 3B: Artelon, Arthrex, Inc., Eli Lilly, Schwartz Biomedical, CONMED Linvatec, Trupanion; 5: Arthrex, Inc., ConforMIS, Coulter Foundation, DePuy Synthes, Eli Lilly, , Merial, Musculoskeletal Transplant Foundation, National Institutes of Health, Purina, U.S. Department of Defense, Zimmer-Biomet, Sites Medical, TissueGen Inc.; 7B: , Thieme; 8: , Journal of Knee Surgery; 9: , Midwest Transplant Network, Musculoskeletal Transplant Foundation.

Cook, James L......1: Arthrex, AthleteIQ, Musculoskeletal Transplant Foundation; 2: Arthrex; 3B: Artelon, Arthrex, CONMED Linvatec, Eli Lilly, Schwartz Biomedical, Trupanion; 5: Arthrex, Inc, ConforMIS, Coulter Foundation, DePuy, A Johnson & Johnson Company, Eli Lilly, , Merial, Musculoskeletal Transplant Foundation, National Institutes of Health, Purina, Sites Medical, TissueGen Inc., U.S. Department of Defense; 7B: , Thieme; 8: , Journal of Knee Surgery; 9: , Midwest Transplant Network, Musculoskeletal Transplant Foundation.

Cooley, Marion*Disclosed no conflict of interest.*

Coombs, Dana J......3A: DePuy Synthes; 4: Johnson & Johnson.

Coon, Allison T*Disclosed no conflict of interest.*

Coon, Craig N5: Lonza Ltd.

Coon, Matthew*Disclosed no conflict of interest.*

Cooper, Benjamin G3A: Articulate Biosciences.

Cooper, H. John.....1: Corin U.S.A; 2: KCI; 3B: Corin U.S.A; KCI Medical Canada Inc; KCI USA Inc; Zimmer Biomet; 5: KCI; 8: JOA, JBJS - America; 9: AAOS.

Cooper, Herbert J......*Disclosed no conflict of interest.*

Cooper, Joe*Disclosed no conflict of interest.*

Cooper, Vaughn*Disclosed no conflict of interest.*

Coplan, Paul.....3A: Johnson & Johnson; 4: Johnson & Johnson.

Copp, Michaela E*Disclosed no conflict of interest.*

Coppock, James Avery*Disclosed no conflict of interest.*

Coppolecchia, Andrea B3A: Stryker; 4: Stryker.

Cordle, Andrew*Disclosed no conflict of interest.*

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Cornish, Jillian*Disclosed no conflict of interest.*

Cornwall, Roger7B: Oakstone Publishing; 9: ORS, ASSH.

Correa, Diego3B: Lipogems USA, LLC.

Cotney, Justin*Disclosed no conflict of interest.*

Cotter, Brendan*Disclosed no conflict of interest.*

Cotter, Eric J.*Disclosed no conflict of interest.*

Cottrell, Jessica*Disclosed no conflict of interest.*

Coughenour, Kelly3A: Embody Inc; 4: Embody Inc.

Coulombe, Jennifer C.*Disclosed no conflict of interest.*

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Cowman, Mary K*Disclosed no conflict of interest.*

Cowman, Trevin*Disclosed no conflict of interest.*

Cox, Ryan*Disclosed no conflict of interest.*

Crane, John K*Disclosed no conflict of interest.*

Crawford, Mallory*Disclosed no conflict of interest.*

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Criscione, Jaynie*Disclosed no conflict of interest.*

Crisco, Joseph (Trey)3B: Extremity Medical; 7A: Extremity Medical; 8: Journal of Biomechanics.

Crisco, Joseph J8: J Biomechanics, JOR.

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Crisco, Joseph J.8: J Biomechanics, JOR.

Crist, Brett D2: Kinetic Concepts, Inc.; 3B: Globus Medical, Pacira; 3C: Orthocentric; 4: Orthopaedic Implant Company; 5: KCI, Synthes; 8: Journal of Hip Surgery, Journal of Orthopaedic Trauma, SLACK Incorporated; 9: AO Trauma North America, International Geriatric Fracture Society, Orthopaedic Trauma Association.

Crocker, Dylan B*Disclosed no conflict of interest.*

Crockett, Rowena*Disclosed no conflict of interest.*

Croen, Brett*Disclosed no conflict of interest.*

Crook, Bryan S*Disclosed no conflict of interest.*

Cross, Michael.....2: Flexion Therapeutics, KCI; 3B: DePuy, A Johnson & Johnson Company, Flexion Therapeutics, Intellijoint, Smith & Nephew, KCI; 4: Imagen, Insight Medical, Intellijoint, Parvizi Surgical Innovation; 5: Exactech, Inc, Intellijoint, Smith & Nephew; 8: Bone and Joint Journal 360, , Techniques in Orthopaedics, Journal of Orthopaedics and Traumatology.

Crotzenburg, Michael.....*Disclosed no conflict of interest.*

Crouch, Dustin L.....*Disclosed no conflict of interest.*

Crowder, Hollis A*Disclosed no conflict of interest.*

Crowley, James*Disclosed no conflict of interest.*

Cruz, Maria*Disclosed no conflict of interest.*

Cubillos, Patricia O.....*Disclosed no conflict of interest.*

Cubillos, Patricia Ortega*Disclosed no conflict of interest.*

Cucchiaroni, Magali*Disclosed no conflict of interest.*

Cui, Can.....*Disclosed no conflict of interest.*

Cui, Min*Disclosed no conflict of interest.*

Cui, Qunjun*Disclosed no conflict of interest.*

Cui, Shangbin*Disclosed no conflict of interest.*

Cunha, Carla.....*Disclosed no conflict of interest.*

Cunningham, Daniel J*Disclosed no conflict of interest.*

Cunningham, Matthew E.5: Radius Health.

Curtin, Caroline M.....*Disclosed no conflict of interest.*

Cushner, Fred.....1: Canary Medical, Smith & Nephew; 2: Smith & Nephew; 3B: OrthoAlign, Smith & Nephew, Acclivity; 4: Canary Medical; 6: Smith & Nephew; 7A: Canary Medical, Smith & Nephew; 7B: thieme, Elsevier; 8: American Journal of Orthopaedics, Knee, CORR, , Orthopaedics.

Cutcliffe, Hattie C.....*Disclosed no conflict of interest.*

Cutter, Brenden*Disclosed no conflict of interest.*

Cuylear, Darnell*Disclosed no conflict of interest.*

Czerwonka, Natalia*Disclosed no conflict of interest.*

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Daffinee, Kathryn.....*Disclosed no conflict of interest.*

Dahia, Chitra L*Disclosed no conflict of interest.*

Dahlgren, Linda A......*Disclosed no conflict of interest.*

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Dai, Zhonghao.....*Disclosed no conflict of interest.*

Daichi, Hayashi*Disclosed no conflict of interest.*

Dailey, Hannah4: OrthoXel; 5: OrthoXel; 6: OrthoXel; 9: ORS.

Dailey, Hannah L.....4: OrthoXel; 5: OrthoXel; 6: OrthoXel; 9: ORS.

Dailey, Hannah L.....4: OrthoXel DAC; 5: OrthoXel DAC; 6: OrthoXel DAC; 9: ORS ISFR.

Daiss, John L......4: MicroB-plex, Inc.

Daiss, John L......*Disclosed no conflict of interest.*

Daji, Akshay*Disclosed no conflict of interest.*

Dalbeth, Nicola*Disclosed no conflict of interest.*

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Dalgren, Linda A......*Disclosed no conflict of interest.*

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Damerau, Alexandra*Disclosed no conflict of interest.*

Damon, Bruce*Disclosed no conflict of interest.*

Damron, Timothy.....3B: Cerement; 5: Stryker, Wright Medical Technology; 7A: Up To Date; 8: J Surgical Oncology.

Damron, Timothy A3B: BoneSupport; 5: Stryker Inc.; 8: JAAOS, BMC-MSK, The Online Orthopedic Journal, Journal of Surgical Oncology, PLOS-One, Journal of Orthopaedic Research, Medicina.

Damron, Timothy A3B: BONE SUPPORT (Cerament); 5: Stryker, Inc (Research Support); 7B: Up To Date, Lippincott; 8: Journal of Surgical Oncology, Journal of Orthopaedic Research, PLoS ONE, The Online Orthopedic Journal, JAAOS, Medicina, BMC-Musculoskeletal Diseases.

Damron, Timothy A3B: Cerement; 5: Stryker, Wright Medical Technology; 7A: UpToDate; 8: J Surgical Oncology.

Damron, Timothy A.1: Stryker, Inc., Orthovita, Inc., Wright Medical, Inc.; 3C: Cerament, Inc.; 7B: eMedicine (author), UpToDate (author), Lippincott, Williams and Wilkins (book author).

Dandridge, Oliver.....*Disclosed no conflict of interest.*

Dandu, Navya*Disclosed no conflict of interest.*

Danelson, Kerry A*Disclosed no conflict of interest.*

Danelson, Kerry A.*Disclosed no conflict of interest.*

Danias, George.....*Disclosed no conflict of interest.*

Daniels, Alan H......*3B: EOS, Medicea, Medtronic Sofamor Danek, Novabone, Orthofix, Inc., Spineart, Stryker; 5: Orthofix, Inc.; 6: Springer; 7A: Southern Spine, Spineart.*

Daniels, Alan H......*3B: EOS, Medicea, Medtronic Sofamor Danek, Novabone, Orthofix, Inc., Spineart, Stryker; 5: Orthofix, Inc.; 6: Springer; 7A: Southern Spine, Spineart; 7B: Springer.*

Daniels, Alan H......*3B: EOS, Medicea, Medtronic Sofamor Danek, Novabone, Orthofix, Inc., Spineart, Stryker; 5: Orthofix, Inc.; 6: Springer; 7A: Southern Spine, Spineart; 7B: Springer.*

Daniels, Alan H......*3B: EOS, Medicea, Medtronic Sofamor Danek, Novabone, Orthofix, Inc., Spineart, Stryker; 5: Orthofix, Inc.; 7A: Southern Spine, Spineart; 7B: Springer.*

Daniels, Alan H......*3B: Stryker, Orthofix, Spineart, and EOS.*

Daniels, Josh*Disclosed no conflict of interest.*

Daniels, Ryan*Disclosed no conflict of interest.*

Danyluk, Stephanie T*Disclosed no conflict of interest.*

Danyluk, Stephanie T.*Disclosed no conflict of interest.*

Daphne Diloretto, Daphne.....*Disclosed no conflict of interest.*

Daquinag, Alexes*Disclosed no conflict of interest.*

Darche, Jean-Philippe*Disclosed no conflict of interest.*

Darwiche, Salim*Disclosed no conflict of interest.*

Daryoush, Joshua R......*Disclosed no conflict of interest.*

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Das, Moumita*Disclosed no conflict of interest.*

Dasa, MD, Vinod*2: Bioventus, Swiftpath/Pacira; 3B: Bioventus, Myoscience; 4: Myoscience, SIGHT Medical; 5: SKK, Caritheal, KCI; 7A: Flexion Therapeutics.*

Dasa, Vinod.....*2: Bioventus, Swiftpath, Pacira; 3B: Bioventus, Pacira; 4: SIGHT Medical, My Medical Images, Goldfinch; 5: SKK, Cartiheal, KCI, Cymedica, OREF, NIH; 8: J of ortho experience and innovation.*

Dasa, Vinod.....*2: Bioventus, Swiftpath/Pacira; 3B: Bioventus, Myoscience; 4: Myoscience, SIGHT Medical; 5: SKK, Caritheal, KCI; 7A: Flexion Therapeutics.*

Dasgupta, Anouska*3A: mtf biologics; 6: ConMed.*

Dasgupta, Anouska3A: MTF Biologics; 6: OrthoFix Medical, Inc.

David, Justin*Disclosed no conflict of interest.*

David, Michael A*Disclosed no conflict of interest.*

Davidson, Anthony*Disclosed no conflict of interest.*

Davies, Michael*Disclosed no conflict of interest.*

Davies, Michael R*Disclosed no conflict of interest.*

Davis, Alexandra L*Disclosed no conflict of interest.*

Davis, Brian*Disclosed no conflict of interest.*

Davis, Brian M*Disclosed no conflict of interest.*

Davis, MD, Jacob*Disclosed no conflict of interest.*

Davis, Noah3A: Exactech, Inc.

Davis, Thomas A*Disclosed no conflict of interest.*

Day, Jonathan*Disclosed no conflict of interest.*

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de Bakker, Chantal*Disclosed no conflict of interest.*

de Bakker, Chantal M.J.*Disclosed no conflict of interest.*

de Bruijn, Joost3A: Kuros Biosciences BV; 4: Kuros Biosciences AG.

de Bruijn, Joost D3A: Kuros Biosciences; 4: Kuros Biosciences.

De Cecco, Marco*Disclosed no conflict of interest.*

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de Groot, Florence3A: Kuros Biosciences BV.

de Groot, Florence3A: Kuros Biosciences.

De La Vega Amador, Rodolfo E. *Disclosed no conflict of interest.*

De la Vega, Rodolfo*Disclosed no conflict of interest.*

De la Vega, Rodolfo E.*Disclosed no conflict of interest.*

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de Mesy Bentley, Karen L*Disclosed no conflict of interest.*

de Mesy Bentley, Karen L.*Disclosed no conflict of interest.*

De Rosa, Enrica*Disclosed no conflict of interest.*

De Rosa, Enrico*Disclosed no conflict of interest.*

De, Chiranjit.....*Disclosed no conflict of interest.*

Deadwiler, Brittney C......*Disclosed no conflict of interest.*

Dear, Kayley.....*Disclosed no conflict of interest.*

DeBaun, Malcolm R*Disclosed no conflict of interest.*

Debski, Richard E*Disclosed no conflict of interest.*

DeClercq, Madeleine G*Disclosed no conflict of interest.*

Decuzzi, Paolo.....*Disclosed no conflict of interest.*

DeFrate, Louis8: Journal of Orthopaedic Research, Journal of Biomechanics, American Journal of Sports Medicine.

DeFrate, Louis E8: Journal of Biomechanics, Journal of Orthopedic Research.

DeFrate, Louis E8: Editorial Board - Journal of Orthopaedic Research; Associate Editor - Journal of Biomechanics, Editorial Board - American Journal of Sports Medicine.

DeFrate, Louis E8: American Journal of Sports Medicine, Journal of Biomechanics, Journal of Orthopaedic Research.

DeFrate, Louis E8: Journal of Biomechanics, Journal of Orthopaedic Research, American Journal of Sports Medicine.

DeFrate, Louis E.*Disclosed no conflict of interest.*

DeFroda, Steven9: AAOS.

Degen, Ryan.....5: Conmed.

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Deland, Jonathan1: Arthrex; 2: Lima Cop; 3B: Wright Medical.

Deland, Jonathan1: Arthrex; 2: Lima Corp; 3B: Wright Medical.

Deland, Jonathan1: Anthrex Inc., Zimmer; 3C: Lima Corporation; 4: Wright Medical Technology, Inc.

Delaney, Lauren J.....*Disclosed no conflict of interest.*

Delanois, Ronald E.5: Flexion Therapeutics, Orthofix Inc, Stryker, Tissue Gene, United Orthopedics; 9: Baltimore City Medical Society.

Delco, Michelle L.....*Disclosed no conflict of interest.*

Delman, Connor*Disclosed no conflict of interest.*

Delman, MD, Connor M*Disclosed no conflict of interest.*

Delp, Michael D*Disclosed no conflict of interest.*

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DeLucia, Spencer E*Disclosed no conflict of interest.*

Delury, Craig P3A: Biocomposites Ltd.

Demetracopoulos, Constantine 1: Exactech; 3B: Exactech, Integra, Paragon 28, Royal Biologics, RTI Surgical, Stryker, Wright Medical.

Demetracopoulos, Constantine 1: Exactech; 2: Integra, Paragon 28; 4: Royal Biologics; 5: RTI Surgical; 6: Stryker; 7A: Wright Medical.

Demetracopoulos, Constantine 3B: Wright Medical, Integra, Stryker, Exactech; 7A: Exactech.

DeMik, David E8: Journal of Arthroplasty.

DeMik, David E8: Editorial Board for Journal of Arthroplasty.

DeMik, David E8: Journal of Arthroplasty, Iowa Orthopedic Journal.

DeMoya, Christian D.*Disclosed no conflict of interest.*

Deng, Cheri*Disclosed no conflict of interest.*

Deng, Jingyao*Disclosed no conflict of interest.*

Deng, Xianghua*Disclosed no conflict of interest.*

Deng, Xiang-Hua*Disclosed no conflict of interest.*

Deng, Ye*Disclosed no conflict of interest.*

Derefinko, Karen J*Disclosed no conflict of interest.*

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Fujita, Koji.....*Disclosed no conflict of interest.*
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Fujita, Ryo.....*Disclosed no conflict of interest.*
Fujita, Shintaro*Disclosed no conflict of interest.*
Fujiwara, Shuichi.....*Disclosed no conflict of interest.*
Fujiwara, Tatsuhiko*Disclosed no conflict of interest.*
Fujiwara, Tomoko*Disclosed no conflict of interest.*
Fukase, Naomasa*Disclosed no conflict of interest.*
Fukuda, Koji*Disclosed no conflict of interest.*
Fukui, Daisuke.....*Disclosed no conflict of interest.*
Fukui, Tomoaki*Disclosed no conflict of interest.*
Fukushima, Wakaba.....*Disclosed no conflict of interest.*
Fullam, Spencer J*Disclosed no conflict of interest.*
Fulton, Travis*Disclosed no conflict of interest.*
Fung, Ashley K.....*Disclosed no conflict of interest.*
Funk, Grahmm A.....*Disclosed no conflict of interest.*
Funk, Julia V.....*Disclosed no conflict of interest.*
Furman, Bridgette D*Disclosed no conflict of interest.*
Furst, William*Disclosed no conflict of interest.*
Furukawa, Jun-ichi*Disclosed no conflict of interest.*
Fusco, Alessandra*Disclosed no conflict of interest.*
Fusellier, Marion.....*Disclosed no conflict of interest.*
Fussell, Cale*Disclosed no conflict of interest.*
Fyhrie, David P.....*Disclosed no conflict of interest.*
Gabel, Leigh*Disclosed no conflict of interest.*
Gaber, Timo*Disclosed no conflict of interest.*
Gabriel, Stefan3A: DePuy Synthes Mitek.

Gaddy, Dana*Disclosed no conflict of interest.*

Gadkari, Niranjan.....*Disclosed no conflict of interest.*

Gaffney, Brecca.....*Disclosed no conflict of interest.*

Gaffney, Brecca M.M*Disclosed no conflict of interest.*

Gaffney, Brecca M.M.*Disclosed no conflict of interest.*

Gagnier, Joel J......*Disclosed no conflict of interest.*

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Galagan, Robert.....*Disclosed no conflict of interest.*

Galatz, Leesa.....3B: Medacta.

Galbraith, Kristyn.....*Disclosed no conflict of interest.*

Galbreath, Ian.....*Disclosed no conflict of interest.*

Gale, Tom*Disclosed no conflict of interest.*

Galesso, Devis.....3A: Fidia Farmaceutici.

Gallagher, Maurice P*Disclosed no conflict of interest.*

Gallate, Zachary S*Disclosed no conflict of interest.*

Gallo, Matthew C.....*Disclosed no conflict of interest.*

Galloway, Chad A.....*Disclosed no conflict of interest.*

Galloway, Joseph*Disclosed no conflict of interest.*

Gamada, Kazuyoshi.....4: Kazuyoshi Gamada is the CEO of GLAB Corporation.

Gammell, Jonathan D.....*Disclosed no conflict of interest.*

Gan, Yudong*Disclosed no conflict of interest.*

Gandhi, Sachin*Disclosed no conflict of interest.*

Gang, Du*Disclosed no conflict of interest.*

Gangi, Lianna R.*Disclosed no conflict of interest.*

Gangishetti, Umesh*Disclosed no conflict of interest.*

Ganio, Edward A.*Disclosed no conflict of interest.*

Ganji, Elahe.....*Disclosed no conflict of interest.*

Gannon, Steven*Disclosed no conflict of interest.*

Gansau, Jennifer*Disclosed no conflict of interest.*

Gansau, Jennifer Gansau*Disclosed no conflict of interest.*

Gantt, Connor*Disclosed no conflict of interest.*

Ganz, Eran.....3A: Active Implants LLC, 6060 Primacy Parkway, Suite 460, Memphis, TN, USA; 4: Active Implants LLC, 6060 Primacy Parkway, Suite 460, Memphis, TN, USA.

Gao, Kenneth*Disclosed no conflict of interest.*

Gao, Kenneth T5: GE Healthcare.

Gao, Liang*Disclosed no conflict of interest.*

Gao, Madeleine A*Disclosed no conflict of interest.*

Gao, Matthew Z.....*Disclosed no conflict of interest.*

Gao, Qi.....*Disclosed no conflict of interest.*

Gao, Xueqin*Disclosed no conflict of interest.*

Gao, Yun*Disclosed no conflict of interest.*

Gao, Zhanguo.....*Disclosed no conflict of interest.*

Garay, Ryan S.....*Disclosed no conflict of interest.*

Garcia, Dioscaris4: BI Medical LLC.

Garcia, Dioscaris3C: BI Medical.

Garcia, Dioscaris R4: BI Medical LLC.

Garcia, Dioscaris R4: BI Medical.

Garcia, Dioscaris R4: BI Medical, LLC.

Garcia, Flavio*Disclosed no conflict of interest.*

Garcia, Jaquelin M*Disclosed no conflict of interest.*

Garcia-Lopez, Edgar*Disclosed no conflict of interest.*

Garcia-Rodriguez, Sylvana*Disclosed no conflict of interest.*

Gardner, Michael J.....6: Dr. Gardner receives personal fees from Pacira Pharmaceuticals, Biocomposites, BoneSupport AB, Conventus, Globus Medical, StabilizOrtho, Synthes, and from KCI outside of the submitted work.

Garg, Koyal4: Have equity interest in GenAssist.

Garlapaty, Ashwin R*Disclosed no conflict of interest.*

Garner, Amy*Disclosed no conflict of interest.*

Garrigues, Grant E.....1: DJ Orthopedics, Tornier; 2: DJ Orthopedics; 3B: Bioventus, DJ Orthopedics, Mitek; 4: Genesys, ROM 3; 5: Tornier; 6: Arthrex, DJ Orthopedics, South Tech; 8: J Shoulder and Elbow Surgery, Techniques in Orthopedics; 9: ASES.

Garrigues, Grant E.....3B: Additive Orthopaedics, DJ Orthopaedics, Mitek, Tornier; 4: CultivateMD, Genesys, PatientIQ, ROM 3; 6: Arthrex Inc, DJ Orthopaedics, SouthTech; 7A: DJ Orthopaedics, Tornier; 8: JSES, Techniques in Orthopaedics; 9: , ASES, AANA.

Garverick, Anna*Disclosed no conflict of interest.*

Gary, Matthew F5: Tyber Medical.

Gasparro, Matthew*Disclosed no conflict of interest.*

Gaston, R Glenn2: DePuy, A Johnson & Johnson Company, Endo Pharmaceutical, Integra, Zimmer; 3B: Biomet, BME, Hanger Clinic, Integra; 7A: Biomet; 8: Journal of Hand Surgery - American; 9: American Association for Hand Surgery, American Society for Surgery of the Hand.

Gatti, Vittorio.....*Disclosed no conflict of interest.*

Gaudilliere, Brice*Disclosed no conflict of interest.*

Gaur, Srisha*Disclosed no conflict of interest.*

Gawlitta, Debby.....*Disclosed no conflict of interest.*

Gawri, Rahul9: ORS-Spine Section.

Gazzuola Rocca, Liliana*Disclosed no conflict of interest.*

Gebhard, Florian*Disclosed no conflict of interest.*

Gehrke, Corinn.....*Disclosed no conflict of interest.*

Geiger, Erik J*Disclosed no conflict of interest.*

Geisler, Christina M*Disclosed no conflict of interest.*

Gelbs, Michelle J*Disclosed no conflict of interest.*

Geller, Jeffrey3B: Smith & Nephew; 5: Smith and Nephew; Orthosensor; Orthopaedic Scientific Research Foundation; Orthopaedic Research and Education Foundation; 8: Clinical Orthopaedics and Related Research; Journal of Arthroplasty; 9: American Association of Hip and Knee Surgeons; American Association of Orthopaedic Surgeons.

Geller, Jeffrey A.*Disclosed no conflict of interest.*

Genin, Guy M.....*Disclosed no conflict of interest.*

Genovese, Peter.....*Disclosed no conflict of interest.*

Genuario, James W3B: Stryker.

Georgiev, Nedelcho3A: Smart-Soft Employee, Georgiev.

Gerges, Justin.....3A: Stryker.

Geris, Liesbet*Disclosed no conflict of interest.*

Gerstenfeld, Louis.....*Disclosed no conflict of interest.*

Getgood, Alan.....3B: Smith & Nephew; 7A: Smith & Nephew.

Getty, Patrick J.....*Disclosed no conflict of interest.*

Gharib Parsa, Arta.....*Disclosed no conflict of interest.*

Ghimire, Prabesh*Disclosed no conflict of interest.*

Gholipour, Ali.....*Disclosed no conflict of interest.*

Ghosh, Rajdeep.....*Disclosed no conflict of interest.*

Ghouse, Shaaz.....*Disclosed no conflict of interest.*

Giangarra, Charles*Disclosed no conflict of interest.*

Giavaresi, Gianluca7A: This study was funded by Fidia Farmaceutici.

Gibbons, Kalin D*Disclosed no conflict of interest.*

Gibbs, Christopher M.....7B: Depuy Synthes.

Gibian, Joseph T.....*Disclosed no conflict of interest.*

Gibson, Breanne HY*Disclosed no conflict of interest.*

Gibson, Margaret.....*Disclosed no conflict of interest.*

Gibson, Mary*Disclosed no conflict of interest.*

Giers, Morgan B*Disclosed no conflict of interest.*

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Gil Alabarse, Paulo.....*Disclosed no conflict of interest.*

Gil, Dmitry*Disclosed no conflict of interest.*

Gil, Joseph A.*Disclosed no conflict of interest.*

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Gilad, Yoav.....*Disclosed no conflict of interest.*

Gilat, Ron*Disclosed no conflict of interest.*

Gilbert, Sophie J.....*Disclosed no conflict of interest.*

Gilbertie, Jessica*Disclosed no conflict of interest.*

Giles, Joshua*Disclosed no conflict of interest.*

Giles, Joshua W.....*Disclosed no conflict of interest.*

Gililand, jeremy3B: Stryker.

Gillespie, Robert3B: Shoulder Innovations, DJO.

Gillies, Austin P.....*Disclosed no conflict of interest.*

Gillinov, Stephen M*Disclosed no conflict of interest.*

Gilmartin, Neda F*Disclosed no conflict of interest.*

Gindri, Izabelle de Mello*Disclosed no conflict of interest.*

Gingery, Anne*Disclosed no conflict of interest.*

Ginley-Hidinger, Matthew*Disclosed no conflict of interest.*

Ginnell, Clara*Disclosed no conflict of interest.*

Gionet-Gonzales, Marissa*Disclosed no conflict of interest.*

Giordano, Federica*Disclosed no conflict of interest.*

Giordano, Gérard*3B: Exactech Inc.*

Gira, Emma*Disclosed no conflict of interest.*

Girardi, Federico*Disclosed no conflict of interest.*

Girardi, Federico P*Disclosed no conflict of interest.*

Giroto, Lorenzo*Disclosed no conflict of interest.*

Gish, Charles C*Disclosed no conflict of interest.*

Gitelis, Steven*1: Onkos Surgical, USMI.*

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Giusti, Nick*Disclosed no conflict of interest.*

Giza, Eric*Disclosed no conflict of interest.*

Giza, Shelby*Disclosed no conflict of interest.*

Gladwin, Mark*Disclosed no conflict of interest.*

Glaeser, Juliane*Disclosed no conflict of interest.*

Glaeser, Juliane D*Disclosed no conflict of interest.*

Glass, Natalie A*Disclosed no conflict of interest.*

Glasser, Jillian*Disclosed no conflict of interest.*

Gleicher, Yehoshua*Disclosed no conflict of interest.*

Glenday, Jonathan Daniel*Disclosed no conflict of interest.*

Glennon, Joseph C*4: ReVivo Medical, LLC.*

Godoy, Michael*Disclosed no conflict of interest.*

Godziuk, Kristine*Disclosed no conflict of interest.*

Goebel, Sven*3B: Exactech, Inc.*

Goel, Danny P*3A: Precision OS Technology.*

Goel, Vijay1: Pardigm Spine, Joimax, Globus, Endosphere, Butterfly; 4: Spinal Balance, Osteonovus, Intellisenze; 5: OsteoNovus FDA, Spinal Balance, Depuy, SI Bone, AO Foundation, Spine Scoliosis LLC, FDA, , Spider Spine LLC, 4WEB, NIH, NSF.

Goel, Vijay1: Paradigm Spine, Joimax; 4: Spinal Balance Inc., OsteoNovus Inc.

Goel, Vijay K......1: Spinal Balance Inc, OsteoNovus Inc.; 4: Paradigm Spine, Joimax.

Goel, Vijay K......1: Globus, Endosphere, Butterfly; 4: Spinal Balance, OsteoNovus, intellisenze; 5: OsteoNovus, Spinal Balance, Depuy Synthes Spine, SI Bone, AO Foundation, Spine Scoliosis LLC, 4Web Medical; 9: NIH, NSF.

Goetz, Jessica E*Disclosed no conflict of interest.*

Goh, Qing.....*Disclosed no conflict of interest.*

Going, James W.*Disclosed no conflict of interest.*

Gold, Garry5: GE Healthcare.

Gold, Garry E.....5: GE Healthcare.

Goldberg, Jacob*Disclosed no conflict of interest.*

Goldring, Mary.....*Disclosed no conflict of interest.*

Goldring, Steven R.4: Co-founder of Ensign Pharmaceutical.

Goldring, Steven R.4: Dr. Goldring is one of the cofounders of Ensign Pharmaceutical.

Golman, Mikhail*Disclosed no conflict of interest.*

Golub, Ivan*Disclosed no conflict of interest.*

Gomez, Andrew*Disclosed no conflict of interest.*

Gomoll, Andreas1: Vericel, Organogenesis; 3B: Moximed, Smith&Nephew; Vericel; 4: JRF, Organogenesis, Vericel; 7B: Organogenesis; 9: Arthroscopy Association of North America, Cartilage, ESSKA, ICRS, International Society of Arthroscopy, Knee Surgery, Orthopaedic Sports Medicine, Knee Surgery, Sports Traumatology, Arthroscopy, OJSM.

Goncalves, Raquel*Disclosed no conflict of interest.*

Goncalves, Raquel M.*Disclosed no conflict of interest.*

Gondo, Hirotaka*Disclosed no conflict of interest.*

Gong, Zhenghua.....*Disclosed no conflict of interest.*

Gonzales, David*Disclosed no conflict of interest.*

Gonzales, David A*Disclosed no conflict of interest.*

González Díaz, Eva C*Disclosed no conflict of interest.*

Gonzalez Fernandez, Tomas.....*Disclosed no conflict of interest.*

Gonzalez, Daniella M*Disclosed no conflict of interest.*

Gonzalez, Felix M*Disclosed no conflict of interest.*

Gonzalez, Gabriella*Disclosed no conflict of interest.*

Gonzalez, Jasmine L*Disclosed no conflict of interest.*

Gonzalez, Roberto*Disclosed no conflict of interest.*

Goode, Adam P*Disclosed no conflict of interest.*

Goodman, Howard*Disclosed no conflict of interest.*

Goodman, Stuart*Disclosed no conflict of interest.*

Goodman, Stuart B*Disclosed no conflict of interest.*

Goodman, Stuart B.*Disclosed no conflict of interest.*

Goodman, Susan*Disclosed no conflict of interest.*

Goodnough, L. Henry*Disclosed no conflict of interest.*

Goodrich, Allison*Disclosed no conflict of interest.*

Goodrich, Laurie*Disclosed no conflict of interest.*

Goodrich, Laurie R*3B: Allosource; 4: Advanced Regenerative Therapies.*

Goodrich, Laurie R.*Disclosed no conflict of interest.*

Gopalakrishnan, Ananthkrishnan *3A: Stryker; 4: Stryker.*

Gordish-Dressman, Heather*Disclosed no conflict of interest.*

Gordon, Adam M*Disclosed no conflict of interest.*

Gordon, Andrew*Disclosed no conflict of interest.*

Goswami, Karan*Disclosed no conflict of interest.*

Goto, Yuta*Disclosed no conflict of interest.*

Gottwald, Robert*Disclosed no conflict of interest.*

Gould, Nicole R.*Disclosed no conflict of interest.*

Gouldin, Austin Gregory*Disclosed no conflict of interest.*

Goulet, Robert W*Disclosed no conflict of interest.*

Goulet, Robert W.*Disclosed no conflict of interest.*

Goyal, Anshit*Disclosed no conflict of interest.*

Goyal, Kanu*Disclosed no conflict of interest.*

Grad, Sibylle*Disclosed no conflict of interest.*

Grammatopoulos, George*Disclosed no conflict of interest.*

Granda, Melissa3A: mtf biologics; 6: ConMed.

Grande, Daniel.....*Disclosed no conflict of interest.*

Grande, Daniel A.....*Disclosed no conflict of interest.*

Grande-Arriola, Hector*Disclosed no conflict of interest.*

Grange, Robert W*Disclosed no conflict of interest.*

Granger, Caroline.....*Disclosed no conflict of interest.*

Grant, John A2: JRF Ortho, Vericel, Conmed Linvatec; 5: JRF Ortho, Arthrex, Aesculap Biologics; 8: Associate Editor for CME - Sports Medicine, JBJSA.

Grant, John A2: JRF Ortho, Vericel, Conmed Linvatec; 5: JRF Ortho, Arthrex, Aesculap Biologics.

Grant, Michael*Disclosed no conflict of interest.*

Grässel, Susanne*Disclosed no conflict of interest.*

Gray, Robert*Disclosed no conflict of interest.*

Gray, Ryan S.....*Disclosed no conflict of interest.*

Greco, Nicole T.....*Disclosed no conflict of interest.*

Greditzer, Harry G*Disclosed no conflict of interest.*

Green, Eric3B: Depuy Synthes.

Green, Samuel*Disclosed no conflict of interest.*

Greenacre, Cheryl*Disclosed no conflict of interest.*

Greenbaum, John.....3B: Theradaptive, Inc.

Greenbaum, Simon*Disclosed no conflict of interest.*

Greenblatt, Matthew*Disclosed no conflict of interest.*

Greenblatt, Matthew B.....*Disclosed no conflict of interest.*

Greendyk, Joshua D.*Disclosed no conflict of interest.*

Greene, Alexander T3A: Exactech, Inc.

Greene, Elizabeth.....3A: PAID EMPLOYEE of Tissue Testing Technologies LLC.

Greene, Vaughn*Disclosed no conflict of interest.*

Greenfield, Edward M.....8: JOR.

Greenfield, Michelle R*Disclosed no conflict of interest.*

Greenwood, Valerie3A: Arthrex, Inc.

Gregoire, Stephanie*Disclosed no conflict of interest.*

Greif, Dylan N*Disclosed no conflict of interest.*

Greig, Danielle*Disclosed no conflict of interest.*

Greising, Sarah.....*Disclosed no conflict of interest.*

Gresham, Robert.....*Disclosed no conflict of interest.*

Griffin, Katherine H......*Disclosed no conflict of interest.*

Griffin, Timothy M8: TM Griffin receives payment as an Associate Editor of the journal Osteoarthritis and Cartilage.

Griffin, Timothy M.*Disclosed no conflict of interest.*

Griffith, Jacob*Disclosed no conflict of interest.*

Griffith, Jacob L.....*Disclosed no conflict of interest.*

Grinstaff, Mark G.3C: Articulate Biosciences.

Grinstaff, Mark W*Disclosed no conflict of interest.*

Griswold, Anthony J.....*Disclosed no conflict of interest.*

Grodzinsky, Alan8: Osteoarthritis and Cartilage.

Grodzinsky, Alan J.....8: Osteoarthritis and Cartilage.

Grodzinsky, Alan J......*Disclosed no conflict of interest.*

Groisser, Benjamin.....*Disclosed no conflict of interest.*

Groke, Martin*Disclosed no conflict of interest.*

Grol, Matthew W*Disclosed no conflict of interest.*

Gross, Jeff3A: Canary Medical; 3B: In Situ Therapeutic Solutions, Inc, Summatix Pty Ltd; 4: Canary Medical, In Situ Therapeutic Solutions, Inc, Summatix Pty Ltx.

Gross, Jeffrey3A: Canary Medical Inc; 3B: In Situ Therapeutic Solutions Inc, Summatix Pty Ltd; 4: Canary Medical Inc, In Situ Therapeutic Solutions Inc, Summatix Pty Ltd.

Gross, Richard.....*Disclosed no conflict of interest.*

Grzeskowiak, Remi M*Disclosed no conflict of interest.*

Gu, Alex*Disclosed no conflict of interest.*

Gu, Jianguo G.....*Disclosed no conflict of interest.*

Gu, Weiyong*Disclosed no conflict of interest.*

Guang, Young.....*Disclosed no conflict of interest.*

Guardia, Angelica.....*Disclosed no conflict of interest.*

Guarise, Cristian.....3A: Fidia Farmaceutici.

Gudmundsson, Paul A.....*Disclosed no conflict of interest.*

Guermazi, Ali*3B: Boston Imaging Core Labs, LLC.*

Guerra, Fernanda.....*3A: 3A.*

Guerra, Rodrigo B*Disclosed no conflict of interest.*

Gugala, Zbigniew*Disclosed no conflict of interest.*

Gui, Tao*Disclosed no conflict of interest.*

Guidetti, Martina*Disclosed no conflict of interest.*

Guilak, Farshid*3A: Cytex.*

Guilak, Farshid*3A: Cytex, Inc.; 4: Cytex, Inc.*

Guilak, Farshid*3A: Cytex Therapeutics; 4: Cytex Therapeutics.*

Guilak, Farshid*3A: Cytex; 4: Cytex.*

Guillaume, Tenner*3B: Nuvasive, Zimmer Biomet.*

Gulati, Simmi*3A: Zimmer Biomet.*

Gullbrand, Sarah*Disclosed no conflict of interest.*

Gullbrand, Sarah E*Disclosed no conflict of interest.*

Gulotta, Lawrence V*3B: Exactech.*

Gunsch, Gilian.....*Disclosed no conflict of interest.*

Guo, Danqing.....*Disclosed no conflict of interest.*

Guo, Fengjing.....*Disclosed no conflict of interest.*

Guo, Ping*Disclosed no conflict of interest.*

Guo, Runsheng.....*Disclosed no conflict of interest.*

Guo, Weihua.....*Disclosed no conflict of interest.*

Guo, Wendi.....*Disclosed no conflict of interest.*

Guo, X Edward*Disclosed no conflict of interest.*

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Guo, Xiang-Dong Edward*Disclosed no conflict of interest.*

Guo, Xiaodong*Disclosed no conflict of interest.*

Guo, Xiaohan*Disclosed no conflict of interest.*

Guo, Xiaojie*Disclosed no conflict of interest.*

Gupta, Munish C*Disclosed no conflict of interest.*

Gupta, Sachin.....*Disclosed no conflict of interest.*

Gupta, Sanjay.....*Disclosed no conflict of interest.*

Gurevich, Mikhail.....*Disclosed no conflict of interest.*

Gusho, Charles A.....*Disclosed no conflict of interest.*

Guss, Daniel6: Extremity Medical.

Guss, Daniel5: Research Support from Butterfly Network.

Gustafson, Jonathan A*Disclosed no conflict of interest.*

Gutierrez, Manuel.....*Disclosed no conflict of interest.*

Guzman, Roberto A.....*Disclosed no conflict of interest.*

Guzman, Roberto Alfonso.....*Disclosed no conflict of interest.*

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Gwark, Ji-Yong*Disclosed no conflict of interest.*

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Habib, Mohamed*Disclosed no conflict of interest.*

Häckel, Sonja*Disclosed no conflict of interest.*

Hacker, Scott.....5: Active Implants LLC, 6060 Primacy Parkway, Suite 460, Memphis, TN, USA.

Hackett, Thomas.....2: Arthrex, Inc., Sonoma Orthopaedics; 3B: Arthrex, Inc.; 4: NICE; 5: Arthrex, Inc.

Haddox, Abby*Disclosed no conflict of interest.*

Haffner, Max.....*Disclosed no conflict of interest.*

Haffner, Max R.....*Disclosed no conflict of interest.*

Haffner-Luntzer, Melanie.....9: Secretary of ORS ISFR; Bord of Directors ECTS Academy.

Haffner-Luntzer, Melanie.....9: Secretary of ORS ISFR; Board of Directors ECTS Academy.

Hagan, Mackenzie.....*Disclosed no conflict of interest.*

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Haglund, Lisbet*Disclosed no conflict of interest.*

Haider, Mohammad N*Disclosed no conflict of interest.*

Haishima, Yuji*Disclosed no conflict of interest.*

Haji Masr, Halimatul*Disclosed no conflict of interest.*

Hakimiyan, Arnavaz*Disclosed no conflict of interest.*

Hakimiyan, Arnavaz A*Disclosed no conflict of interest.*

Hakukawa, Satoshi*Disclosed no conflict of interest.*

Hakun, Maxwell*Disclosed no conflict of interest.*

Hall, Anya*Disclosed no conflict of interest.*

Hall, Deborah*Disclosed no conflict of interest.*

Hall, Deborah J*Disclosed no conflict of interest.*

Hall, Deborah J3B: Wright Medical Technology; 5: Wright Medical Technology, Zimmer-Biomet; 9: ORS.

Hall, Lauren*Disclosed no conflict of interest.*

Hall, Patrick T*Disclosed no conflict of interest.*

Hall, Thomas Ainsley Grant*Disclosed no conflict of interest.*

Hallab, Nadim6: Orthopedic Analysis LLC, BioEngineering Solutions Inc.

Hallab, Nadim3A: Orthopedic Analysis.

Haller, Justin*Disclosed no conflict of interest.*

Halvachizadeh, Sascha*Disclosed no conflict of interest.*

Hama, Shunpei*Disclosed no conflict of interest.*

Hamada, Hidetoshi*Disclosed no conflict of interest.*

Hamada, Takahiro*Disclosed no conflict of interest.*

Hamai, Satoshi*Disclosed no conflict of interest.*

Hambright, Sealy*Disclosed no conflict of interest.*

Hambright, William S*Disclosed no conflict of interest.*

Hamer, Andrew J*Disclosed no conflict of interest.*

Hamilton, John L*Disclosed no conflict of interest.*

Hamilton, Landon D*Disclosed no conflict of interest.*

Hamilton, Landon Douglas*Disclosed no conflict of interest.*

Hamlin, Brian1: Bodycad; 3A: Bodycad; 4: Bodycad; 8: J. Arthroplasty, Transfusion; 9: AAOS.

Hamlin, Brian R*Disclosed no conflict of interest.*

Hamm, Megan*Disclosed no conflict of interest.*

Hampp, Emily.....3A: Stryker; 4: Stryker.

Hampp, Emily.....3A: Stryker.

Hamrick, Mark*Disclosed no conflict of interest.*

Hamrick, Mark W*Disclosed no conflict of interest.*

Han, Biao*Disclosed no conflict of interest.*

Han, Cheol-Min.....*Disclosed no conflict of interest.*

Han, Guebum.....*Disclosed no conflict of interest.*

Han, Hyuk Soo*Disclosed no conflict of interest.*

Han, Hyuk-Soo*Disclosed no conflict of interest.*

Han, Jian*Disclosed no conflict of interest.*

Han, Lin.....*Disclosed no conflict of interest.*

Han, Mo*Disclosed no conflict of interest.*

Han, Yan*Disclosed no conflict of interest.*

Hanada, Shuji.....*Disclosed no conflict of interest.*

Hanamatsu, Hisatoshi*Disclosed no conflict of interest.*

Hanaoka, Chad.....*Disclosed no conflict of interest.*

Hanberg, Pelle*Disclosed no conflict of interest.*

Hancock, Christopher.....*Disclosed no conflict of interest.*

Hand, Sarah*Disclosed no conflict of interest.*

Häne, Surya I.....*Disclosed no conflict of interest.*

Haneda, Masahiko*Disclosed no conflict of interest.*

Hankenson, Kurt D.....3C: Orthofix; 4: Rockwell Medical and Emergent; 5: Orthofix; 6: Orthofix; 7A: Orthofix; 8: Clinical Reviews in Bone and Mineral Metabolism; Connective Tissue Research; 9: American Society for Bone and Mineral Research.

Hankenson, Kurt D.....*Disclosed no conflict of interest.*

Hankins, Margaret L.....*Disclosed no conflict of interest.*

Hanna, Gabriel.....*Disclosed no conflict of interest.*

Hansbro, Philip M*Disclosed no conflict of interest.*

Hansen, Oliver*Disclosed no conflict of interest.*

Hanson, Marcelline*Disclosed no conflict of interest.*

Hao, Stephanie P.*Disclosed no conflict of interest.*

Hao, Xiaoxia*Disclosed no conflict of interest.*

Haqqi, Tariq M*Disclosed no conflict of interest.*

Haque, Eakeen Muhammad.....*Disclosed no conflict of interest.*

Hara, Hitomi*Disclosed no conflict of interest.*

Harada, Satoru.....*Disclosed no conflict of interest.*

Harada, Tetsunari*Disclosed no conflict of interest.*

Harasymowicz, Natalia*Disclosed no conflict of interest.*

Harasymowicz, Natalia S.....*Disclosed no conflict of interest.*

Harato, Kengo*Disclosed no conflict of interest.*

Harbham, Pratap*Disclosed no conflict of interest.*

Harder, Ben.....3A: Stryker.

Hardisty, Michael.....*Disclosed no conflict of interest.*

Hardy, Jolene*Disclosed no conflict of interest.*

Hargens, Alan R.....8: J Grav Physiology Board; 9: Society of Gravitational Physiology.

Hargett, Zach*Disclosed no conflict of interest.*

Hargreaves, Brian5: GE Healthcare.

Hargreaves, Brian A5: GE Healthcare.

Hargrove, Levi.....*Disclosed no conflict of interest.*

Harissa, Zainab.....*Disclosed no conflict of interest.*

Harker, Emily C*Disclosed no conflict of interest.*

Harley, Joel B.*Disclosed no conflict of interest.*

Harm, Kyrstle A.....*Disclosed no conflict of interest.*

Harman, Melinda*Disclosed no conflict of interest.*

Harmon, Ian*Disclosed no conflict of interest.*

Harrington, Colin*Disclosed no conflict of interest.*

Harrington, Kristin*Disclosed no conflict of interest.*

Harris, Charles.....*Disclosed no conflict of interest.*

Harris, Charles A.3A: Regeneron Pharmaceuticals; 4: Regeneron Pharmaceuticals; 6: Regeneron Pharmaceuticals; 7A: Regeneron Pharmaceuticals.

Harris, Gerald J......9: Pediatric Orthopaedic Society of N.A. (POSNA) Committee Member, Children's Orthopedics in Underserved Regions (COUR), GCMAS, Past President of the Board of Directors,.

Harris, Loyall*Disclosed no conflict of interest.*

Harris, Michael.....*Disclosed no conflict of interest.*

Harris, Michael D*Disclosed no conflict of interest.*

Harris, Michael D.*Disclosed no conflict of interest.*

Harris, Mike D*Disclosed no conflict of interest.*

Harris, Taylor*Disclosed no conflict of interest.*

Harris, Taylor L.....*Disclosed no conflict of interest.*

Harrison, Zoe*Disclosed no conflict of interest.*

Hart, Christopher M......*Disclosed no conflict of interest.*

Hartanto, Jeffry.....*Disclosed no conflict of interest.*

Hartl, Roger4: 3D Bio Corp.

Härtl, Roger4: 3D Bio Corp.

Hartnell, Nicholas J4: Bone Ligament Tendon.

Harty, James A2: DePuy Synthes; 4: OrthoXel DAC; 5: OrthoXel DAC; 6: OrthoXel DAC.

Haru Yang, Haru.....*Disclosed no conflict of interest.*

Harvey, Justin*Disclosed no conflict of interest.*

Harvey, Michael Joseph*Disclosed no conflict of interest.*

Hasan, Sadaf*Disclosed no conflict of interest.*

Hasegawa, Masahiro*Disclosed no conflict of interest.*

Hashimoto, Shingo.....*Disclosed no conflict of interest.*

Hashimoto, Takeshi*Disclosed no conflict of interest.*

Hashimoto, Yusuke*Disclosed no conflict of interest.*

Hassan, Chaudhry R*Disclosed no conflict of interest.*

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Hast, Michael W.....*Disclosed no conflict of interest.*

Hastings, Mary K.....*Disclosed no conflict of interest.*

Hatakeyama, Miki.....*Disclosed no conflict of interest.*

Hattori, Kyosuke*Disclosed no conflict of interest.*

Hattori, Soichi3B: Soichi Hattori.

Hattori, Yoshio.....*Disclosed no conflict of interest.*

Haubruck, Patrick8: Associated Editor OTSR.

Haudenschild, Anne K.....4: Tesio Pharmaceutical.

Haudenschild, Dominik R4: Tesio Pharmaceuticals.

Haugan, Delaney.....*Disclosed no conflict of interest.*

Haunschild, Eric*Disclosed no conflict of interest.*

Hauselle, Jerome*Disclosed no conflict of interest.*

Havasy, Janice.....*Disclosed no conflict of interest.*

Havey, Robert.....*Disclosed no conflict of interest.*

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Hawk, Greg S.....*Disclosed no conflict of interest.*

Hawk, Gregory S.*Disclosed no conflict of interest.*

Hawse, Gresin*Disclosed no conflict of interest.*

Hawse, Gresin P*Disclosed no conflict of interest.*

Hayashi, Shinya.....*Disclosed no conflict of interest.*

Hayashi, Takuo*Disclosed no conflict of interest.*

Hayashi, Yukinori*Disclosed no conflict of interest.*

Hayashi, Yuta*Disclosed no conflict of interest.*

Hayashida, Kenta*Disclosed no conflict of interest.*

Hayden, Holly*Disclosed no conflict of interest.*

Haynes, Sara*Disclosed no conflict of interest.*

Hays, Thomas R.....*Disclosed no conflict of interest.*

He, Chunrong*Disclosed no conflict of interest.*

He, Jade*Disclosed no conflict of interest.*

He, Jianghua*Disclosed no conflict of interest.*

He, Jinshen.....*Disclosed no conflict of interest.*

He, Rui*Disclosed no conflict of interest.*

He, Wenjun*Disclosed no conflict of interest.*

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Healy, Kevin*Disclosed no conflict of interest.*

Heaton, Will3A: DiscGenics; 4: DiscGenics.

Heckelman, Lauren N*Disclosed no conflict of interest.*

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Heckmann, Nathanael D*Disclosed no conflict of interest.*

Heckmann, Terry*Disclosed no conflict of interest.*

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Heer, Martina*Disclosed no conflict of interest.*

Hefferan, Samantha A*Disclosed no conflict of interest.*

Hegarty, John*Disclosed no conflict of interest.*

Heil, Todd3A: Theradaptive, Inc.

Heldreth, Mark A3A: DePuy Synthes; 4: DePuy Synthes.

Heldreth, Mark A.3A: DePuy Synthes; 4: DePuy Synthes.

Hélène, Follet*Disclosed no conflict of interest.*

Helgason, Benedikt*Disclosed no conflict of interest.*

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Hempen, Eric C5: Zimmer, Inc. provided the hardware.

Henak, Corinne R*Disclosed no conflict of interest.*

Henderson, Adam D3A: Zimmer Biomet; 4: Zimmer Biomet.

Henderson, Cortney*Disclosed no conflict of interest.*

Henne, Michael*Disclosed no conflict of interest.*

Henning, Emilie N*Disclosed no conflict of interest.*

Henninger, Heath*Disclosed no conflict of interest.*

Henry, Aaron*Disclosed no conflict of interest.*

Henry, Jensen K*Disclosed no conflict of interest.*

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Henry, Marquessa*Disclosed no conflict of interest.*

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Hepfer, R. Glenn*Disclosed no conflict of interest.*

Herda, Ashley.....*Disclosed no conflict of interest.*

Hermanns, Christina*Disclosed no conflict of interest.*

Hernandez, Christopher J.....*Disclosed no conflict of interest.*

Hernandez, Paula.....*Disclosed no conflict of interest.*

Herndon, Carl.....9: AAOS.

Herrick, Jim L.*Disclosed no conflict of interest.*

Herrmann, Marietta.....*Disclosed no conflict of interest.*

Hertzler, Justin S3A: Zimmer Biomet; 4: Zimmer Biomet.

Herzog, Mackenzie D3A: serve as consultant and PI for studies conducted by orthopedic device manufactures, paid for indirectly to their full-time employer IQVIA.

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Hess, Madeline*Disclosed no conflict of interest.*

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Hetzel, Scott J*Disclosed no conflict of interest.*

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Heuberger, Peter3A: Nobel Biocare Services AG.

Heveran, Chelsea*Disclosed no conflict of interest.*

Heveran, Chelsea M.....*Disclosed no conflict of interest.*

Heveran, Chelsea M......*Disclosed no conflict of interest.*

Hewett, Timothy E*Disclosed no conflict of interest.*

Hewison, Christopher*Disclosed no conflict of interest.*

Hibbard, Julia N.....*Disclosed no conflict of interest.*

Hickernell, Thomas*Disclosed no conflict of interest.*

Hickok, Noreen J5: Irrisept.

Hidalgo-García, César.....*Disclosed no conflict of interest.*

Hideshima, Kelsey.....*Disclosed no conflict of interest.*

Hieronimus, Brooke*Disclosed no conflict of interest.*

Higa, Kotaro*Disclosed no conflict of interest.*

Higaki, Hidehiko.....*Disclosed no conflict of interest.*
Higashihira, Shota.....*Disclosed no conflict of interest.*
Higgins, Cassidy*Disclosed no conflict of interest.*
Higgins, Thomas.....*Disclosed no conflict of interest.*
Highsmith, Angelica3A: DiscGenics; 4: DiscGenics.
Higinbotham, Sean*Disclosed no conflict of interest.*
Higinbotham, Sean E.....5: Sean E Higinbotham.
Higuera, Carlos.....*Disclosed no conflict of interest.*
Higuita-Castro, Natalia.....*Disclosed no conflict of interest.*
Hikida, Minami*Disclosed no conflict of interest.*
Hill, Cherice N*Disclosed no conflict of interest.*
Hill, Ryan.....*Disclosed no conflict of interest.*
Hillen, Travis J*Disclosed no conflict of interest.*
Hilliard, Genevieve.....*Disclosed no conflict of interest.*
Hillstrom, Howard J*Disclosed no conflict of interest.*
Hillstrom, Howard J.*Disclosed no conflict of interest.*
Hillstrom, Rajshree*Disclosed no conflict of interest.*
Hillyard, Clay.....3A: 3A.
Him Lim, Boon3A: DePuy Synthes.
Hines, Madeline R.....*Disclosed no conflict of interest.*
Hinkle, Andrew*Disclosed no conflict of interest.*
Hino, Jun*Disclosed no conflict of interest.*
Hiraiwa, Hideki*Disclosed no conflict of interest.*
Hiranaka, Takafumi.....*Disclosed no conflict of interest.*
Hiroaki, Wada*Disclosed no conflict of interest.*
Hirose, Kazuki*Disclosed no conflict of interest.*
Hiroshima, Yuji*Disclosed no conflict of interest.*
Hirota, Kento*Disclosed no conflict of interest.*
Hirvasniemi, Jukka*Disclosed no conflict of interest.*
Hishimura, Ryosuke*Disclosed no conflict of interest.*

Hishimura, Ryouzuke*Disclosed no conflict of interest.*

Hislop, Brady.....*Disclosed no conflict of interest.*

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Ho, Brendan.....*Disclosed no conflict of interest.*

Ho, Charles P.....*3B: Rotation Medical; 5: Research supported by Steadman Philippon Research Institute grant funding or in-kind donations from Arthrex, DJO, MLB, Ossur, Siemens, Canon, Smith & Nephew, XTRE & DoD, NIH grants.*

Ho, Mei-Ling*Disclosed no conflict of interest.*

Ho, Michael.....*Disclosed no conflict of interest.*

Ho, Nathan C.....*Disclosed no conflict of interest.*

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Hobson, Eric.....*Disclosed no conflict of interest.*

Hodges, Nathan*Disclosed no conflict of interest.*

Hodgkinson, Tom.....*Disclosed no conflict of interest.*

Hoefler, Anna K.....*Disclosed no conflict of interest.*

Hoefler, Anna K.....*Disclosed no conflict of interest.*

Hoekzema, Nathan*Disclosed no conflict of interest.*

Hoel, Cathleen*Disclosed no conflict of interest.*

Hoemann, Caroline D.....*3C: Ortho RTi; 4: Ortho RTi; 8: Cartilage; Open OA&C.*

Hoey, David*Disclosed no conflict of interest.*

Hoff, Paula*Disclosed no conflict of interest.*

Hoffman, Eric*Disclosed no conflict of interest.*

Hoffman, Isaac.....*Disclosed no conflict of interest.*

Hoffman, Jeffrey*Disclosed no conflict of interest.*

Hoffman, Jeffrey William*Disclosed no conflict of interest.*

Hoffmann, Ilona.....*3A: Teijin Nakashima Medical Co.,Ltd.*

Hogan, MaCalus.....*Disclosed no conflict of interest.*

Hogan, MaCalus V.....*Disclosed no conflict of interest.*

Hoggard, Nigel*Disclosed no conflict of interest.*

Hohl, Katherine M.....*Disclosed no conflict of interest.*

Hoke, Ahmet.....3B: Pfizer; 8: Annals of Clinical Translational Neurology, Experimental Neurology; 9: Disarm Therapeutics, AxoProtego Therapeutics.

Holcomb, Amy E......*Disclosed no conflict of interest.*

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Holguin, Nilsson8: Associate Editor for Connective Tissue Research.

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Holloway, Matthew*Disclosed no conflict of interest.*

Holmboe, Michael*Disclosed no conflict of interest.*

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Holt, Abigail G.....*Disclosed no conflict of interest.*

Homan, Kentaro.....*Disclosed no conflict of interest.*

Honda, Hideki*Disclosed no conflict of interest.*

Hong, Jae Taek.....*Disclosed no conflict of interest.*

Hontani, Kazutoshi.....*Disclosed no conflict of interest.*

Hoppe, Sven.....*Disclosed no conflict of interest.*

Hoppock, Gabriel*Disclosed no conflict of interest.*

Hoppock, Gabriel A*Disclosed no conflict of interest.*

Hopster, Klaus.....*Disclosed no conflict of interest.*

Hopwood, James D6: MatOrtho Ltd.

Hoque Apu, Ehsanul.....*Disclosed no conflict of interest.*

Hordacre, Brenton8: International Advisory Editorial Board of the Journal of Physiotherapy.

Horiuchi, Keisuke6: Eribulin mesylate was provided by Eisai Co., Ltd.

Horn, Andrew*Disclosed no conflict of interest.*

Hornig, Jonathan Chang.....*Disclosed no conflict of interest.*

Hornung, Alexander L*Disclosed no conflict of interest.*

Horton, Jason.....*Disclosed no conflict of interest.*

Horton, Jason A*Disclosed no conflict of interest.*

Horton, William*Disclosed no conflict of interest.*

Hoshi, Kenji.....*Disclosed no conflict of interest.*

Hoshino, Takashi.....*Disclosed no conflict of interest.*

Hoshino, Yuichi*Disclosed no conflict of interest.*

Hosokawa, Yoshiaki*Disclosed no conflict of interest.*

Hossain, Nabid Aunjum*Disclosed no conflict of interest.*

Hosseini Nasab, Seyyed Hamed *Disclosed no conflict of interest.*

Hosseini, Zahra*Disclosed no conflict of interest.*

Hosseinzadeh, Shayan*Disclosed no conflict of interest.*

Hotaling, Jessica A*Disclosed no conflict of interest.*

Housman, Genevieve*Disclosed no conflict of interest.*

Howard, James2: DePuy, Stryker; 3B: DePuy, Stryker, Smith & Nephew, IntelliJoint; 4: PersaFix Technologies Inc.; 5: DePuy; 6: DePuy, Stryker, Smith & Nephew, Zimmer, Microport.

Howe, Danielle*Disclosed no conflict of interest.*

Howe, Tet Sen.....*Disclosed no conflict of interest.*

Howell, MD, Stephen M.....3B: Medacta Inc, Zimmer Biomet Inc.

Howell, Stephen1: Zimmer-Biomet; 3B: Medacta; 7A: Zimmer-Biomet.

Howell, Stephen M3B: Medacta; 7A: Medacta.

Howell, Stephen M.3B: Medacta; 7A: Medacta.

Hoyland, Judith A.....*Disclosed no conflict of interest.*

Hozack, William3B: Stryker.

Hrekso, M. Timothy*Disclosed no conflict of interest.*

Hsu, Ching-Yun.....*Disclosed no conflict of interest.*

Hsu, Erin L*Disclosed no conflict of interest.*

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Hsu, Ginny Ching-Yun*Disclosed no conflict of interest.*

Hsu, Po-Cheng.....*Disclosed no conflict of interest.*

Hsu, Wellington K3B: Medtronic; 9: LSRS, NASS, AAOS, CSRS.

Hsu, Wellington K3B: Medtronic; 9: Lumbar Spine Research Society, American Academy of Orthopaedic Surgeons, North American Spine Society, Cervical Spine Research Society.

Hsu, Wellington K.3B: Medtronic; 9: American Academy of Orthopaedic Surgeons, Lumbar Spine Research Society, North American Spine Society, Cervical Spine Research Society.

Hsu, Wellington K.3B: Medtronic; 9: AAOS, LSRS, NASS, CSRS.

Hu, Diane*Disclosed no conflict of interest.*

Hu, Dorothy*Disclosed no conflict of interest.*

Hu, Liangjun*Disclosed no conflict of interest.*

Hu, Nan.....*Disclosed no conflict of interest.*

Hu, Xiaoqing*Disclosed no conflict of interest.*

Hu, Yizhong.....*Disclosed no conflict of interest.*

Hu, Yizhong Jenny*Disclosed no conflict of interest.*

Huang, Alice.....*Disclosed no conflict of interest.*

Huang, Alice H.....*Disclosed no conflict of interest.*

Huang, Bert.....*Disclosed no conflict of interest.*

Huang, Chun-Hao.....*Disclosed no conflict of interest.*

Huang, Chun-Yuh*Disclosed no conflict of interest.*

Huang, Ejun.....*Disclosed no conflict of interest.*

Huang, Elijah.....*Disclosed no conflict of interest.*

Huang, Elijah Ejun*Disclosed no conflict of interest.*

Huang, Hanqing*Disclosed no conflict of interest.*

Huang, Jiahui*Disclosed no conflict of interest.*

Huang, Lingwei*Disclosed no conflict of interest.*

Huang, Shuting*Disclosed no conflict of interest.*

Huang, Tony Chieh-Ting.....*Disclosed no conflict of interest.*

Huang, Tung-Fu.....*Disclosed no conflict of interest.*

Huang, Yi-Chao*Disclosed no conflict of interest.*

Huang, Yichen.....*Disclosed no conflict of interest.*

Huang, Yufei*Disclosed no conflict of interest.*

Huang, Yuming.....*Disclosed no conflict of interest.*

Huang, ZeYu.....*3B: DePuy Synthes.*

Huang, Zhiyu.....*Disclosed no conflict of interest.*

Huard, Charles*Disclosed no conflict of interest.*

Huard, Johnny.....*8: Cell Transplantation, Current Genomics, Gene Review Letters, Histology & Histopathology, Journal of Tissue Science & Engineering, Journal Surgical Science, Molecular*

Therapy, ORS2, Regenerative Medicine Journal, World Journal of Biological Chemistry, World Journal of Orthopaedics; 9: Orthopaedic Research Society.

Huard, Johnny.....1: Cook Myosite; 9: Orthopaedic Research Society.

Huard, Mathew.....*Disclosed no conflict of interest.*

Huard, Matthieu*Disclosed no conflict of interest.*

Huayamave, Victor*Disclosed no conflict of interest.*

Huber, Christian*Disclosed no conflict of interest.*

Huble-Kozey, Cheryl L*Disclosed no conflict of interest.*

Huddleston, Hailey*Disclosed no conflict of interest.*

Huddleston, Hailey P.....*Disclosed no conflict of interest.*

Hudson, David*Disclosed no conflict of interest.*

Hudson, David M*Disclosed no conflict of interest.*

Hudson, David M.*Disclosed no conflict of interest.*

Huegel, Julianne.....*Disclosed no conflict of interest.*

Hugard, Shannon*Disclosed no conflict of interest.*

Hughes, Alexander.....*Disclosed no conflict of interest.*

Hughes, Alexander P*Disclosed no conflict of interest.*

Hughes, David.....*Disclosed no conflict of interest.*

Hughes, Jessica*Disclosed no conflict of interest.*

Hughes, Jonathan*Disclosed no conflict of interest.*

Huish, Eric G.....*Disclosed no conflict of interest.*

Huk, Olga*Disclosed no conflict of interest.*

Hull, Maury.....5: Medacta; 8: Journal of Biomechanics.

Hull, Maury.....5: Medacta International; 7B: Journal of Biomechanics.

Hull, Maury L5: Medacta.

Hull, Maury L.6: Medacta, Inc.; 8: Journal of Biomechanics.

Hull, Peyton*Disclosed no conflict of interest.*

Hull, PhD, Maury L.....5: Medacta Inc; 8: Journal of Biomechanics.

Hum, Nicholas R.....*Disclosed no conflict of interest.*

Hume, Donald R.....*Disclosed no conflict of interest.*

Humphries, Kenneth M......*Disclosed no conflict of interest.*

Hung, Alec Lik-Hang*Disclosed no conflict of interest.*

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Hung, Clark T......*1: Allosource, MTF; 2: Editor of Journal of Orthopedics; 8: Editor for Orthopedic Research and Reviews.*

Hunt, Heather*Disclosed no conflict of interest.*

Hunt, Nic L*Disclosed no conflict of interest.*

Hunter, James*Disclosed no conflict of interest.*

Hunter, William*3A: Canary Medical; 3B: Adherium, Correvio Pharmaceuticals, Rex Medical, SoundBite Medical; 4: Canary Medical, Adherium, Correvio Pharmaceuticals, Rex Medical, SoundBite Medical, Summatix.*

Hunter, William*3A: Canary Medical; 3B: Adherium, Correvio Pharmaceuticals, Rex Medical, SoundBite Medical, Summatix; 4: Canary Medical, Adherium, Correvio Pharmaceuticals, Rex Medical, SoundBite Medical, Summatix.*

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Hurchalla, Georgia*3A: MicroPort Orthopedics.*

Hurst, Lawrence C*1: Endo Pharmaceuticals, Biospecifics Technology Corp.; 3B: Endo Pharmaceuticals, Biospecifics Technology Corp.*

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Hurtig, Mark B*3B: Ortho Regenerative Technologies Inc, Boehringer, Epibone; 4: Ortho Regenerative Technologies Inc; 5: Ortho Regenerative Technologies Inc.*

Husmann, Niklas*Disclosed no conflict of interest.*

Hussein, Nazar*Disclosed no conflict of interest.*

Hussien, Amro A*Disclosed no conflict of interest.*

Hussien, Amro A.*Disclosed no conflict of interest.*

Hussien, Amro Ahmed*Disclosed no conflict of interest.*

Hutson, Irina*Disclosed no conflict of interest.*

Hwang, Charles*Disclosed no conflict of interest.*

Hwang, Eunjoo.....*Disclosed no conflict of interest.*

Hwang, In Won*Disclosed no conflict of interest.*

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Hwang, Mintai*Disclosed no conflict of interest.*

Hyodo, Yuki.....*Disclosed no conflict of interest.*

Hyonmin, Choe*Disclosed no conflict of interest.*

Iatridis, James*Disclosed no conflict of interest.*

Iatridis, James C*Disclosed no conflict of interest.*

Iatridis, James C.*Disclosed no conflict of interest.*

Idota, Masaru*Disclosed no conflict of interest.*

Igarashi, Yoichi.....*Disclosed no conflict of interest.*

Ignatius, Anita.....*Disclosed no conflict of interest.*

Igram, Cassim M*Disclosed no conflict of interest.*

Ii, Satoki.....*Disclosed no conflict of interest.*

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Iizawa, Norishige*Disclosed no conflict of interest.*

Ijomanta, Chiemezue N.....*Disclosed no conflict of interest.*

Ike, Hiroyuki.....*Disclosed no conflict of interest.*

Ikebe, Satoru*Disclosed no conflict of interest.*

Ikemura, Satoshi.....*Disclosed no conflict of interest.*

Ikeuchi, Masahiko.....5: Eli Lilly Japan K.K.

Ikuta, Kenmei.....*Disclosed no conflict of interest.*

Ikuta, Kunihiro*Disclosed no conflict of interest.*

Illien-Junger, Svenja.....*Disclosed no conflict of interest.*

Imagama, Shiro.....*Disclosed no conflict of interest.*

Imagama, Shirou.....*Disclosed no conflict of interest.*

Imamura, Ryuta*Disclosed no conflict of interest.*

Imanaka-Yoshida, Kyoko.....*Disclosed no conflict of interest.*

Imhauser, Carl.....*Disclosed no conflict of interest.*

Imhauser, Carl W*Disclosed no conflict of interest.*

Ina, Jason*Disclosed no conflict of interest.*

Inaba, Yutaka.....3A: Stryker Japan. K.K.

Inaba, Yutaka.....2: Stryer, smith & nephew, Zimmer Bimomet.

Inacio, Jordan*Disclosed no conflict of interest.*

Inamdar, Gaurav*Disclosed no conflict of interest.*

Indelli, Pier F3B: Exactech.

Innella, Kevin*Disclosed no conflict of interest.*

Ino, Takumi.....*Disclosed no conflict of interest.*

Inokuchi, Akihiko*Disclosed no conflict of interest.*

Inomata, Kei*Disclosed no conflict of interest.*

Inoue, Hiroaki*Disclosed no conflict of interest.*

Inoue, Hiroyuki*Disclosed no conflict of interest.*

Inoue, Nozomu5: National Institutes of Health.

Inoue, takahiro*Disclosed no conflict of interest.*

Inoue, Takayuki*Disclosed no conflict of interest.*

Intravia, Jessica M.....*Disclosed no conflict of interest.*

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Inui, Atsuyuki.....*Disclosed no conflict of interest.*

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Irie, Tomoyo Y.....*Disclosed no conflict of interest.*

Irrgang, James.....*Disclosed no conflict of interest.*

Irrgang, James J.....*Disclosed no conflict of interest.*

Irwin, Rebecca M*Disclosed no conflict of interest.*

Isaksson, Hanna*Disclosed no conflict of interest.*

Isales, Carlos*Disclosed no conflict of interest.*

Isaza, Humberto.....3A: DePuy Synthes.

Isguven, Selin*Disclosed no conflict of interest.*

Ishida, Hiroyuki.....*Disclosed no conflict of interest.*

Ishigaki, Kosei*Disclosed no conflict of interest.*

Ishihara, Shingo*Disclosed no conflict of interest.*

Ishii, Keiko*Disclosed no conflict of interest.*

Ishii, Tomoo*Disclosed no conflict of interest.*

Ishikawa, Masakazu*Disclosed no conflict of interest.*

Ishizuka, Shinya*Disclosed no conflict of interest.*

Ismaily, Sabir*Disclosed no conflict of interest.*

Ismaily, Sabir K*Disclosed no conflict of interest.*

Isono, Masaaki*Disclosed no conflict of interest.*

Ita, Meagan*Disclosed no conflict of interest.*

Ita, Meagan E.*Disclosed no conflict of interest.*

Ito, Hiroshi*Disclosed no conflict of interest.*

Ito, Juji*Disclosed no conflict of interest.*

Ito, Kentaro*Disclosed no conflict of interest.*

Ito, Naoaki*Disclosed no conflict of interest.*

Itoh, Masafumi*Disclosed no conflict of interest.*

Itoi, Eiji*Disclosed no conflict of interest.*

Itou, Junya*Disclosed no conflict of interest.*

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Ivashkiv, Lionel3C: Eli Lilly.

Ivashkiv, Lionel B3C: Eli Lilly and Company.

Ivashkiv, Lionel B3C: Eli Lilly.

Ivashkiv, Lionel B.3C: Eli Lilly.

Ivy, Amanda K*Disclosed no conflict of interest.*

Iwama, Yu*Disclosed no conflict of interest.*

Iwamoto, Masahiro8: Editorial Board member for journal "Osteoarthritis and Cartilage".

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Iwasa, Makoto*Disclosed no conflict of interest.*

Iwasaki, Hiroshi*Disclosed no conflict of interest.*

Iwasaki, Koji5: Olympus Terumo Biomaterials Corp.

Iwasaki, Koji6: This work was supported by [KAKEN-Grant-in-Aid for Young Scientists] under grant #18K16642.

Iwakaki, Koji5: Olympus Terumo Biomaterials Corp.

Iwasaki, Norimasa.....*Disclosed no conflict of interest.*

Iyer, Abishek.....*Disclosed no conflict of interest.*

Iyer, Hari.....*Disclosed no conflict of interest.*

Izumi, Masashi.....*Disclosed no conflict of interest.*

Izumi, Soutarou.....*Disclosed no conflict of interest.*

Izumiyama, Takuya.....*Disclosed no conflict of interest.*

Jaarsma, Ruurd L.....*Disclosed no conflict of interest.*

Jackson, Alicia.....*Disclosed no conflict of interest.*

Jackson, Alicia R.....*Disclosed no conflict of interest.*

Jackson, Nicholas J.....*Disclosed no conflict of interest.*

Jacobs, Cale.....*3B: Flexion Therapeutic; 5: Flexion Therapeutic, Smith & Nephew; 8: Journal of Sports Rehabilitation.*

Jacobs, Cale.....*3B: Flexion Therapeutics; 5: Flexion Therapeutics, Smith & Nephew.*

Jacobs, Joshua J.....*3B: Zimmer-Biomet; 4: Hyalex; 5: Medtronic Sofamor Danek, Nuvasive, Zimmer-Biomet; 7B: Journal of Bone and Joint Surgery-American; 9: American Board of Orthopedic Surgery, Inc, Hip Society, Orthopedic Research and Education Foundation.*

Jacobs, Joshua J.....*3B: Medtronic Sofamor Danek; 4: Implant Protection, Medtronic Sofamor Danek, Nuvasive, Zimmer.*

Jacobs, Joshua J.....*3B: Medtronic; 4: Implant Protection; 5: Zimmer, Nuvasive, Medtronic.*

Jacobs, Joshua J......*5: Zimmer Biomet.*

Jacobs, Joshua J......*4: Implant Protection; 5: Medtronics, Nuvasive, Zimmer-Biomet.*

Jacobs, Joshua J......*3B: Medtronic Sofamor Danek; 4: Implant Protection; 5: Medtronic Sofamor Danek, Nuvasiv, Zimmer Biomet.*

Jacobs, Joshua J......*3B: Medtronic Sofamor Danek; 4: Implant Protection; 5: Medtronic Sofamor Danek, Nuvasive, Zimmer.*

Jacobsen, Timothy.....*Disclosed no conflict of interest.*

Jacobsen, Timothy R......*Disclosed no conflict of interest.*

Jacobson, Daniel.....*Disclosed no conflict of interest.*

Jacofsky, Marc.....*Disclosed no conflict of interest.*

Jäger, Patrick.....*Disclosed no conflict of interest.*

Jahandar, Amir.....*Disclosed no conflict of interest.*

Jahandar, Hamidreza.....*Disclosed no conflict of interest.*

Jahangir, Sana.....*Disclosed no conflict of interest.*

Jain, Era*Disclosed no conflict of interest.*

Jain, Nitin B.....*8: J Bone Joint Surg Am, Am J Phys Med Rehabil.*

Jaiswal, Anmol J K.....*Disclosed no conflict of interest.*

Jakus, Adam.....*3A: Dimension Inx LLC; 4: Dimension Inx LLC.*

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James, Aaron W*3B: Novadip Biosciences; 8: Editorial Board, Bone Research.*

James, Aaron W*8: Bone Research, American Journal of Pathology; 9: Novadip Biosciences.*

James, Aaron W......*3B: Scientific Advisory Board, Novadip Biosciences; 9: Editorial Board, Bone Research, American Journal of Pathology.*

James, Bryan.....*Disclosed no conflict of interest.*

James, Nia.....*Disclosed no conflict of interest.*

Janani, Ronak.....*Disclosed no conflict of interest.*

Jang, Ji Eun Jang.....*Disclosed no conflict of interest.*

Jang, Jin Ju*Disclosed no conflict of interest.*

Jang, SeonHo*Disclosed no conflict of interest.*

Janssen, Dennis.....*Disclosed no conflict of interest.*

Javaheri, Behzad*Disclosed no conflict of interest.*

Javidan, MD, Yashar.....*3B: Alphatec, Stryker, Nuvasive, Medicea.*

Javors, Martin*Disclosed no conflict of interest.*

Jayabalan, Prakash*Disclosed no conflict of interest.*

Jayasuriya, Chathuraka*Disclosed no conflict of interest.*

Jayasuriya, Chathuraka T.*Disclosed no conflict of interest.*

Jayasuriya, Raveen L*Disclosed no conflict of interest.*

Jayaswal, Daksh*Disclosed no conflict of interest.*

Je, Mable*Disclosed no conflict of interest.*

Jean Paul, Roux.....*Disclosed no conflict of interest.*

Jeffers, Jonathan R.T......3A: Embody; 4: Embody, Additive Instruments.

Jekir, Michael.....3A: NuVasive.

Jennings, J. Amber5: Abbott Diabetes Care, Austin Medical Ventures.; 6: USBiologics; 7B: Elsevier.

Jennings, Jessica A5: Abbott Diabetes Care, Austin Medical Ventures; 6: USBiologics; 7B: Elsevier.

Jensen, Andrew3A: Exactech Inc.

Jensen, Magnus*Disclosed no conflict of interest.*

Jeong, Hyeon Jang*Disclosed no conflict of interest.*

Jeong, Kyu Sang*Disclosed no conflict of interest.*

Jeong, Seung Jo.....*Disclosed no conflict of interest.*

Jeong, Soyeon.....*Disclosed no conflict of interest.*

Jeong, Yong-Hoon.....*Disclosed no conflict of interest.*

Jepsen, Karl J......*Disclosed no conflict of interest.*

Jerabek, Seth3B: Stryker Corp; 4: Stryker Corp; 7A: Stryker Corp.

Jernigan, Ebony.....*Disclosed no conflict of interest.*

Jernigan, Ebony A*Disclosed no conflict of interest.*

Jessen, Christian*Disclosed no conflict of interest.*

Jeyapalina, Sujee*Disclosed no conflict of interest.*

Jia, Shaowei*Disclosed no conflict of interest.*

Jia, Zhenshan*Disclosed no conflict of interest.*

Jiang, Haochen.....*Disclosed no conflict of interest.*

Jiang, Jie.....*Disclosed no conflict of interest.*

Jiang, Kunqi.....*Disclosed no conflict of interest.*

Jiang, Min*Disclosed no conflict of interest.*

Jiang, Nan*Disclosed no conflict of interest.*

Jiang, Wensen.....*Disclosed no conflict of interest.*

Jiang, Xi.....*Disclosed no conflict of interest.*

Jiang, Xiaosong*Disclosed no conflict of interest.*

Jiang, Xiaqing.....*Disclosed no conflict of interest.*

Jiang, YingDisclosed no conflict of interest.

Jin, LiDisclosed no conflict of interest.

Jin, Yan.....Disclosed no conflict of interest.

Jin, Yonghui.....Disclosed no conflict of interest.

Jing, DianDisclosed no conflict of interest.

Jo, Changwung.....Disclosed no conflict of interest.

Jo, Stephanie Y.....Disclosed no conflict of interest.

Jo, Woo LamDisclosed no conflict of interest.

Jo, Yongdeok.....Disclosed no conflict of interest.

Joaquim, Tony.....3A: Zimmer Biomet.

Joenathan, AnishaDisclosed no conflict of interest.

Joenathan, Anisha T.....Disclosed no conflict of interest.

Joenathan, Anisha T.....Disclosed no conflict of interest.

Joeng, Kyu SangDisclosed no conflict of interest.

Joesph, PanosDisclosed no conflict of interest.

Johnson, CamilleDisclosed no conflict of interest.

Johnson, Camille CDisclosed no conflict of interest.

Johnson, Casey P.....Disclosed no conflict of interest.

Johnson, Evan P.Disclosed no conflict of interest.

Johnson, Gabriel TDisclosed no conflict of interest.

Johnson, Gillian.....Disclosed no conflict of interest.

Johnson, KarenDisclosed no conflict of interest.

Johnson, Karen CDisclosed no conflict of interest.

Johnson, KeirDisclosed no conflict of interest.

Johnson, Maribeth.....Disclosed no conflict of interest.

Johnson, Samuel R.....Disclosed no conflict of interest.

Johnson, SherryDisclosed no conflict of interest.

Johnson, ValerieDisclosed no conflict of interest.

Johnston, Jeff.....Disclosed no conflict of interest.

Johnstone, Brian7B: Parent license royalties from Osiris Therapeutics, Inc.; 8: Editorial board of European Cells Materials.

Johnstone, Brian7A: Osiris Therapeutics.

Johnstone, Brian7B: Osiris Therapeutics, inc.; 8: European Cells and Materials.

Joiner, Akaysha*Disclosed no conflict of interest.*

Jonason, Jennifer H*Disclosed no conflict of interest.*

Jones, Alison5: DePuy Synthes; 6: DePuy Synthes.

Jones, Amanda3A: DiscGenics; 4: DiscGenics.

Jones, Brandon*Disclosed no conflict of interest.*

Jones, Brandon C*Disclosed no conflict of interest.*

Jones, Conor*Disclosed no conflict of interest.*

Jones, Deryk*Disclosed no conflict of interest.*

Jones, Hugh*Disclosed no conflict of interest.*

Jones, Kendra Wilson*Disclosed no conflict of interest.*

Jones, Kerywn*Disclosed no conflict of interest.*

Jones, Kyle*Disclosed no conflict of interest.*

Jones, Morgan*Disclosed no conflict of interest.*

Jones, Olivia L.*Disclosed no conflict of interest.*

Jones, Ryan*Disclosed no conflict of interest.*

Joo, Peter*Disclosed no conflict of interest.*

Jopkiewicz, Anita*Disclosed no conflict of interest.*

Jordan, David*Disclosed no conflict of interest.*

Jordanides, Jack*Disclosed no conflict of interest.*

Jørgensen, Andrea René*Disclosed no conflict of interest.*

Jorgensen, Thomas*Disclosed no conflict of interest.*

Joseph, Elias*Disclosed no conflict of interest.*

Joshua, Dines S3B: Arthrex.

Ju, Derek*Disclosed no conflict of interest.*

Juan, Lopez*Disclosed no conflict of interest.*

Julkunen, Petro*Disclosed no conflict of interest.*

Juncker, Ryan B.....*Disclosed no conflict of interest.*

June, Ronald K*Disclosed no conflict of interest.*

Jung, Amaury3A: Blue Ortho.

Jung, Jae-Young*Disclosed no conflict of interest.*

Junginger, Lucas.....*Disclosed no conflict of interest.*

Junginger, Lucas M.....*Disclosed no conflict of interest.*

Juni, Peter2: Amgen, Ava, Fresenius; 3C: Abbott Vascular, Astra Zeneca, Biotronik, Biosensors, St. Jude Medical, Terumo and The Medicines Company; 5: Astra Zeneca, Biotronik, Biosensors International, Eli Lilly and The Medicines Company.

Kabel, Jesper.....*Disclosed no conflict of interest.*

Kadaba, Murali3B: Ingenium Spine.

Kadokia, Rishin J.*Disclosed no conflict of interest.*

Kadkoy, Yazan.....*Disclosed no conflict of interest.*

Kadoya, Ken.....*Disclosed no conflict of interest.*

Kage, Craig C.....*Disclosed no conflict of interest.*

Kahlenberg, Cynthia.....*Disclosed no conflict of interest.*

Kaihara, Kenta*Disclosed no conflict of interest.*

Kaimaki, Domna-Maria*Disclosed no conflict of interest.*

Kainth, Nimrath Narayan Singh *Disclosed no conflict of interest.*

Kaiser, Jarred*Disclosed no conflict of interest.*

Kaiser, Joshua T*Disclosed no conflict of interest.*

Kaji, Deepak.....*Disclosed no conflict of interest.*

Kajikawa, Shuhei.....*Disclosed no conflict of interest.*

Kajikawa, Yoshiteru*Disclosed no conflict of interest.*

Kakiuchi, Yuji*Disclosed no conflict of interest.*

Kakutani, Kenichiro.....*Disclosed no conflict of interest.*

Kalajzic, Ivo*Disclosed no conflict of interest.*

Kalbfleisch, Theodore S.....*Disclosed no conflict of interest.*

Kalbitz, Miriam*Disclosed no conflict of interest.*

Kallman, Tyler.....*Disclosed no conflict of interest.*

Kalluri, Anita*Disclosed no conflict of interest.*

Kalunian, Kenneth*Disclosed no conflict of interest.*

Kamada, Kohei.....*Disclosed no conflict of interest.*

Kamada, Yoichiro.....*Disclosed no conflict of interest.*

Kamal, Robin N*Disclosed no conflict of interest.*

Kamali, Amir*Disclosed no conflict of interest.*

Kamalitdinov, Timur B*Disclosed no conflict of interest.*

Kamara, Eli.....*Disclosed no conflict of interest.*

Kamaraj, Achi.....*Disclosed no conflict of interest.*

Kamenaga, Tomoyuki*Disclosed no conflict of interest.*

Kamihata, Satoshi.....*Disclosed no conflict of interest.*

Kamimura, Masayuki.....*Disclosed no conflict of interest.*

Kamiya, Tomoaki*Disclosed no conflict of interest.*

Kamiya, Yasunari*Disclosed no conflict of interest.*

Kammer, MaryRose3A: Organogenesis.

Kanai, Satoshi*Disclosed no conflict of interest.*

Kanamoto, Takashi*Disclosed no conflict of interest.*

Kanarek, Andrew*Disclosed no conflict of interest.*

Kanda, Yutaro*Disclosed no conflict of interest.*

Kandel, Shital.....*Disclosed no conflict of interest.*

Kane, Gillian.....*Disclosed no conflict of interest.*

Kane, Gillian E.....*Disclosed no conflict of interest.*

Kane, Matthew *Disclosed no conflict of interest.*

Kane, Robert.....*Disclosed no conflict of interest.*

Kaneda, Giselle*Disclosed no conflict of interest.*

Kaneko, Taizo.....*Disclosed no conflict of interest.*

Kanemura, Naohiko*Disclosed no conflict of interest.*

Kanemura, Nohiko.....*Disclosed no conflict of interest.*

Kang, Hyung Mo*Disclosed no conflict of interest.*

Kang, James D.....*Disclosed no conflict of interest.*

Kang, Kyoung-Tak*Disclosed no conflict of interest.*

Kania-Richmond, Ania*Disclosed no conflict of interest.*

Kanim, Linda4: Medtronic.

Kanno, Keijiro*Disclosed no conflict of interest.*

Kanno, Seiji*Disclosed no conflict of interest.*

Kano, Koichiro.....*Disclosed no conflict of interest.*

Kanski, Gregory.....*Disclosed no conflict of interest.*

Kanto, Ryo*Disclosed no conflict of interest.*

Kanzaki, Lauren F*Disclosed no conflict of interest.*

Kanzaki, Noriyuki*Disclosed no conflict of interest.*

Kaplan, David L*Disclosed no conflict of interest.*

Kaplan, Lee D*Disclosed no conflict of interest.*

Kaplan, Nathan B.*Disclosed no conflict of interest.*

Karas, Vasili*Disclosed no conflict of interest.*

Kargilis, Daniel*Disclosed no conflict of interest.*

Kargilis, Daniel C*Disclosed no conflict of interest.*

Karim, Lamya*Disclosed no conflict of interest.*

Karimi, Davood*Disclosed no conflict of interest.*

Karjalainen, Kalle Johannes*Disclosed no conflict of interest.*

Karkache, Ismael.....*Disclosed no conflict of interest.*

Karkache, Ismael Y*Disclosed no conflict of interest.*

Karkare, Nakul*Disclosed no conflict of interest.*

Karner, Courtney*Disclosed no conflict of interest.*

Karner, Courtney M*Disclosed no conflict of interest.*

Karott, Sean*Disclosed no conflict of interest.*

Karra, Swathi*Disclosed no conflict of interest.*

Kartha, Sonia*Disclosed no conflict of interest.*

Karuman, Zara*Disclosed no conflict of interest.*

Karunaseelan, Kabelan J*Disclosed no conflict of interest.*

Kashanchi, Kevin.....*Disclosed no conflict of interest.*

Kashanchi, Kevin I......*Disclosed no conflict of interest.*

Kashyap, Ritesh*Disclosed no conflict of interest.*
Kasitz, Jaden*Disclosed no conflict of interest.*
Kasznel, Alex.....*Disclosed no conflict of interest.*
Katagiri, Hiroki.....*Disclosed no conflict of interest.*
Katano, Hisako.....*Disclosed no conflict of interest.*
Kataoka, Kiminari*Disclosed no conflict of interest.*
Kates, Stephen L*Disclosed no conflict of interest.*
Kato, Kenji*Disclosed no conflict of interest.*
Katragadda, Akhil*Disclosed no conflict of interest.*
Katyal, Priya.....*Disclosed no conflict of interest.*
Kaur, Gurbani.....*Disclosed no conflict of interest.*
Kaur, Gurcharan.....*Disclosed no conflict of interest.*
Kaushal, Neil*Disclosed no conflict of interest.*
Kaushal, Shankar*Disclosed no conflict of interest.*
Kawabata, Yusuke*Disclosed no conflict of interest.*
Kawahara, Shinya*Disclosed no conflict of interest.*
Kawai, Shunsuke.....*Disclosed no conflict of interest.*
Kawakami, Kazuyoshi*Disclosed no conflict of interest.*
Kawakami, Kensaku.....*Disclosed no conflict of interest.*
Kawakami, Noriaki.....*Disclosed no conflict of interest.*
Kawakami, Yohei*Disclosed no conflict of interest.*
Kawamoto, Teruya.....*Disclosed no conflict of interest.*
Kawamura, Daisuke*Disclosed no conflict of interest.*
Kawamura, Yoshi*Disclosed no conflict of interest.*
Kawamura, Yusuke*Disclosed no conflict of interest.*
Kawano, Koichiro*Disclosed no conflict of interest.*
Kawarai, Yuya*Disclosed no conflict of interest.*
Kawasaki, Makoto*Disclosed no conflict of interest.*
Kawasaki, Toshisuke*Disclosed no conflict of interest.*
Kawata, Kazumasa*Disclosed no conflict of interest.*

Kawcak, Chris.....*Disclosed no conflict of interest.*

Kay, Robert M......*Disclosed no conflict of interest.*

Kazama, Tomohiko*Disclosed no conflict of interest.*

Kazemi, Soroush*Disclosed no conflict of interest.*

Kazezian, Zepur.....*Disclosed no conflict of interest.*

Kazuya, Ikoma.....*Disclosed no conflict of interest.*

Kean, Thomas*Disclosed no conflict of interest.*

Kean, Thomas J4: FUJIY, GILD, GWW.

Keaveny, Tony M.3B: O.N. Diagnostics; 4: O.N. Diagnostics.

Keefer, Ryan3A: Depuy Synthes.

Keener, Jay D1: Shoulder Innovations; 3B: Arthrex, Shoulder Innovations, Wright Medical; 4: Genesis, LLC; 7A: Shoulder Innovations; 8: J Shoulder Elbow Surg.

Keeney, James A3B: DePuy, A Johnson & Johnson Company, Flexion Therapeutics, Heron Therapeutics; 8: Journal of Hip Surgery, Journal of Knee Surgery, Orthopedics; 9: American Association of Hip and Knee Surgeons, American Orthopaedic Association, Mid-American Orthopaedic Association, Missouri State Orthopaedic Association.

Keeney, James A3B: DePuy, A Johnson & Johnson Company, Flexion Therapeutics, Heron Therapeutics; 8: Journal of Hip Surgery, Journal of Knee Surgery; 9: American Association of Hip and Knee Surgeons, American Orthopaedic Association, Mid-American Orthopaedic Association, Missouri State Orthopaedic Association.

Kefala, Vasiliki.....*Disclosed no conflict of interest.*

Kegode, Imali*Disclosed no conflict of interest.*

Kelkar, Amey.....*Disclosed no conflict of interest.*

Kelkar, Shaunak*Disclosed no conflict of interest.*

Kellam, James8: Medicine, Journal of Orthopaedic Trauma, Journal of Bone and Joint Surgery, BM,C; 9: AO Foundation, Past Presidents Committee.

Keller, Laura Elizabeth*Disclosed no conflict of interest.*

Kelley, Benjamin*Disclosed no conflict of interest.*

Kelley, Benjamin V*Disclosed no conflict of interest.*

Kelley, Eric E.....*Disclosed no conflict of interest.*

Kelly, Domhnall C.....*Disclosed no conflict of interest.*

Kelly, Shayne R*Disclosed no conflict of interest.*

Kemler, Bryson R.*Disclosed no conflict of interest.*

Kemp, Stephen*Disclosed no conflict of interest.*

Kempter, Elena*Disclosed no conflict of interest.*

Kenawy, Hagar M......*Disclosed no conflict of interest.*

Kenichiro, Kakutani.....*Disclosed no conflict of interest.*

Kenji, Takahashi.....*Disclosed no conflict of interest.*

Kennedy, John G3B: In2Bones, Memphis, TN.

Kenney, H. Mark*Disclosed no conflict of interest.*

Kent, Brandon.....*Disclosed no conflict of interest.*

Kenter, Keith.....*Disclosed no conflict of interest.*

Kenter, Mitchell*Disclosed no conflict of interest.*

Ker, Dai Fei Elmer.....9: I am a committee member of ORS.

Ker, Elmer Dai Fei.....*Disclosed no conflict of interest.*

Kerckhofs, Greet*Disclosed no conflict of interest.*

Kerkhoffs, Gino MMJ*Disclosed no conflict of interest.*

Kernkamp, Willem A*Disclosed no conflict of interest.*

Kerr, Bethany A.....*Disclosed no conflict of interest.*

Kerr, Geoffrey J.....*Disclosed no conflict of interest.*

Kerry, Robert M*Disclosed no conflict of interest.*

Kersh, Mariana*Disclosed no conflict of interest.*

Keter, Daniel.....3A: Zimmer Biomet.

Ketonis, Constantinos*Disclosed no conflict of interest.*

Keyak, Joyce H1: Bone-Rad Therapeutics, Inc.; 4: Bone-Rad Therapeutics, Inc.; 9: ORS NIMC.

Khairallah, Ramzi J*Disclosed no conflict of interest.*

Khan, Mohd N.....*Disclosed no conflict of interest.*

Khan, Nazir*Disclosed no conflict of interest.*

Khan, Nazir M*Disclosed no conflict of interest.*

Khan, Safdar*Disclosed no conflict of interest.*

Khan, Wasim.....*Disclosed no conflict of interest.*

Khandha, Ashutosh.....*Disclosed no conflict of interest.*

Kharlamov, A*Disclosed no conflict of interest.*

Kharlamov, Alexander*Disclosed no conflict of interest.*

Kharma, Lara.....*Disclosed no conflict of interest.*

Khokhar, Ahmed*Disclosed no conflict of interest.*

Khokhar, Suhirad*Disclosed no conflict of interest.*

Khoshbin, Amir*Disclosed no conflict of interest.*

Kiapour, Ata M......*3B: MIACH Orthopaedics; 8: BMC Musculoskeletal Disorders.*

Kiapour, Ata M......*8: Editor for BMC Musculoskeletal Disorders.*

Kida, Hiroaki*Disclosed no conflict of interest.*

Kidani, Teruki.....*Disclosed no conflict of interest.*

Kido, Mariko*Disclosed no conflict of interest.*

Kido, Yusuke*Disclosed no conflict of interest.*

Kiernan, Sam.....*Disclosed no conflict of interest.*

Kihara, Shinsuke*Disclosed no conflict of interest.*

Kikuchi, Kenichi.....*Disclosed no conflict of interest.*

Killian, Megan L*Disclosed no conflict of interest.*

Kilway, Kathleen V......*Disclosed no conflict of interest.*

Kim, Carolyn*Disclosed no conflict of interest.*

Kim, Cory*Disclosed no conflict of interest.*

Kim, Do-Gyoon.....*Disclosed no conflict of interest.*

Kim, Dong Hwa*Disclosed no conflict of interest.*

Kim, Hannah*Disclosed no conflict of interest.*

Kim, Harry.....*Disclosed no conflict of interest.*

Kim, Harry K. W.*Disclosed no conflict of interest.*

Kim, Hee Joong*3B: Corentec company.*

Kim, Hubert*Disclosed no conflict of interest.*

Kim, Hyunsoo.....*Disclosed no conflict of interest.*

Kim, Jaeyoung.....*Disclosed no conflict of interest.*

Kim, Jayoung.....*Disclosed no conflict of interest.*

Kim, Jeehun*Disclosed no conflict of interest.*

Kim, Jin-SungDisclosed no conflict of interest.
Kim, Jongkil.....Disclosed no conflict of interest.
Kim, Jun S.....Disclosed no conflict of interest.
Kim, JungsungDisclosed no conflict of interest.
Kim, Kang-Il.....Disclosed no conflict of interest.
Kim, LilyDisclosed no conflict of interest.
Kim, Min JiDisclosed no conflict of interest.
Kim, Min Seok.....Disclosed no conflict of interest.
Kim, MorganDisclosed no conflict of interest.
Kim, NathanDisclosed no conflict of interest.
Kim, Ra Jeong.....Disclosed no conflict of interest.
Kim, SeanDisclosed no conflict of interest.
Kim, Seo YeongDisclosed no conflict of interest.
Kim, SeoyeongDisclosed no conflict of interest.
Kim, StewartDisclosed no conflict of interest.
Kim, Sun Jin.....Disclosed no conflict of interest.
Kim, Sung YeonDisclosed no conflict of interest.
Kim, Sung-Jae.....Disclosed no conflict of interest.
Kim, SungwooDisclosed no conflict of interest.
Kim, WooYoungDisclosed no conflict of interest.
Kim, You JiDisclosed no conflict of interest.
Kim, Youngji.....Disclosed no conflict of interest.
Kim, Young-JoDisclosed no conflict of interest.
Kimbrel, Brandon.....Disclosed no conflict of interest.
Kimmel, RonDisclosed no conflict of interest.
Kimmerling, Kelly3A: Organogenesis.
Kimmerling, Kelly A.....3A: Organogenesis.
Kimura, SoichiroDisclosed no conflict of interest.
Kimura, TadashiDisclosed no conflict of interest.
Kim-Wang, Sophia Y.....Disclosed no conflict of interest.

Kindig, Matthew W*Disclosed no conflict of interest.*

King, David*Disclosed no conflict of interest.*

King, Elizabeth*Disclosed no conflict of interest.*

King, Melissa*Disclosed no conflict of interest.*

Kingstedt, Owen*Disclosed no conflict of interest.*

Kinoshita, Eiji*Disclosed no conflict of interest.*

Kinoshita, Takuya*Disclosed no conflict of interest.*

Kinter, Michael T.....*Disclosed no conflict of interest.*

Kirchner, Marieluise.....*Disclosed no conflict of interest.*

Kirkbride-Romeo, Lara*Disclosed no conflict of interest.*

Kirkwood, Renata*Disclosed no conflict of interest.*

Kirnaz, Sertac*Disclosed no conflict of interest.*

Kirsch, Thorsten*Disclosed no conflict of interest.*

Kirtley, Margaret G.*Disclosed no conflict of interest.*

Kishimoto, Kenji.....*Disclosed no conflict of interest.*

Kiss-Toth, Endre*Disclosed no conflict of interest.*

Kitamura, Kenji*Disclosed no conflict of interest.*

Kitayama, Kazumichi.....*Disclosed no conflict of interest.*

Kitoh, Hiroshi*Disclosed no conflict of interest.*

Kitsis, Richard N*Disclosed no conflict of interest.*

Kiu, Alice*Disclosed no conflict of interest.*

Kiyohara, Masato.....*Disclosed no conflict of interest.*

Klahr, Bruno.....*Disclosed no conflict of interest.*

Klahsen, Olena M.....*Disclosed no conflict of interest.*

Klatt, Brian*Disclosed no conflict of interest.*

Klein, Gordon L*Disclosed no conflict of interest.*

Klein, Gregg R2: Zimmer; 3B: Corentec, Zimmer; 5: Zimmer; 7A: Corentec, Zimmer; 7B: Jay Pee Publishers; 8: American Journal of Orthopedics, Journal of Arthroplasty, Journal of Bone and Joint Surgery – American; 9: AAOS.

Klein, Gregg R.2: Zimmer; 3B: Corentec, Zimmer; 5: Zimmer; 7A: Corentec, Zimmer; 7B: Jay Pee Publishers; 8: American Journal of Orthopedics, Journal of Arthroplasty, Journal of Bone and Joint Surgery - American; 9: AAOS.

Klein, Gregg R.2: Zimmer; 3B: Corentec, Zimmer; 5: Zimmer; 6: Jay Pee publishers; 7A: Corentec, Zimmer; 7B: Jay Pee publishers; 8: American Journal of Orthopedics, Journal of Arthroplasty, Journal of Bone and Joint Surgery; 9: AAOS.

Klein, Karina.....*Disclosed no conflict of interest.*

Klein-Nulend, Jenneke*Disclosed no conflict of interest.*

Klemt, Christian*Disclosed no conflict of interest.*

Kleweno, Conor*Disclosed no conflict of interest.*

Klimstra, Marc5: Kinetyx.

Klineberg, Eric.....3B: Depuy Synthes; 9: AOSpine.

Klineberg, Eric.....3B: Depuy Synthes, Stryker, Medcrea, Medtronic.

Kloser, Heidi.....*Disclosed no conflict of interest.*

Kluczynski, Melissa*Disclosed no conflict of interest.*

Kluczynski, Melissa A.*Disclosed no conflict of interest.*

Kluge, Morgan C......*Disclosed no conflict of interest.*

Klüppel, Michael*Disclosed no conflict of interest.*

Kluser, Nadine*Disclosed no conflict of interest.*

Kluz, Paige N*Disclosed no conflict of interest.*

Kmiec, Stanley3A: DePuy Synthes; 4: Johnson & Johnson.

Knapik, Derrick*Disclosed no conflict of interest.*

Knapp, Emma.....*Disclosed no conflict of interest.*

Knapp, Paul.....*Disclosed no conflict of interest.*

Knecht, Raphael S*Disclosed no conflict of interest.*

Kneeland, Bruce.....*Disclosed no conflict of interest.*

Knell, Robert.....*Disclosed no conflict of interest.*

Knight, Britta*Disclosed no conflict of interest.*

Knights, Alexander J......*Disclosed no conflict of interest.*

Knothe Tate, Melissa3C: Co-Founder TTPeriOz, an implant start up unrelated to this study; 4: Equity in TTPeriOz, an implant start up unrelated to this abstract.

Knothe Tate, Melissa3C: Co-Founder, Start up company TissuTex, novel textile implants and wearables; 4: Equity in TissuTex, per 3C.

Knothe Tate, Melissa3C: Co-Founder of start up company, TissuTex; 4: quite in start up company, 3C.

Knowles, Nik*Disclosed no conflict of interest.*

Knowles, Nikolas*Disclosed no conflict of interest.*

Knowles, Nikolas K*Disclosed no conflict of interest.*

Knudson, Cheryl B*Disclosed no conflict of interest.*

Knudson, Warren*Disclosed no conflict of interest.*

Ko, Ching-Chang*Disclosed no conflict of interest.*

Ko, Frank C*Disclosed no conflict of interest.*

Ko, Sunho*Disclosed no conflict of interest.*

Ko, Tiffany*Disclosed no conflict of interest.*

Kobak, Kamil A*Disclosed no conflict of interest.*

Kobayashi, Hideyuki*Disclosed no conflict of interest.*

Kobayashi, Naomi*Disclosed no conflict of interest.*

Kobayashi, Shu*Disclosed no conflict of interest.*

Koch, John*Disclosed no conflict of interest.*

Koch, John A*Disclosed no conflict of interest.*

Koch, Kevin*Disclosed no conflict of interest.*

Kodigudla, Manoj*Disclosed no conflict of interest.*

Koff, Matthew F5: GE Healthcare.

Koff, Matthew F8: Editorial Board of JOR.

Koff, Matthew F8: Editorial Board JOR.

Koff, Matthew F5: GE Healthcare; 8: Editorial Board JOR.

Koga, Hideyuki*Disclosed no conflict of interest.*

Kogai, Yasumichi*Disclosed no conflict of interest.*

Kogan, Feliks5: GE Healthcare.

Koguchi, Masashi*Disclosed no conflict of interest.*

Koh, In Jun*Disclosed no conflict of interest.*

Koh, Jason4: Marrow Access Technologies, Acuitive; 8: OJSM; 9: ISAKOS, IPFG, AAOS, AOSSM, AANA, ASES, IAOS.

Koh, Jason L3B: Flexion Therapeutics, Acuitive Technologies, Marrow Access Technologies; 4: Acuitive Technologies, Marrow Access Technologies; 9: Patellofemoral Foundation, International Patellofemoral Study Group.

Koh, Joyce SB*Disclosed no conflict of interest.*

Koh, Yong-Gon*Disclosed no conflict of interest.*

Kohei, Onishi*Disclosed no conflict of interest.*

Kohler, Rachel*Disclosed no conflict of interest.*

Kohli, Nupur*Disclosed no conflict of interest.*

Kohnen, Michael3A: Stryker.

Kohno, Yuji*Disclosed no conflict of interest.*

Kohno, Yusuke*Disclosed no conflict of interest.*

Koichi, Nakagawa*Disclosed no conflict of interest.*

Kojima, Toshihisa*Disclosed no conflict of interest.*

Kokabu, Terufumi*Disclosed no conflict of interest.*

Kokubun, Takanori*Disclosed no conflict of interest.*

Kolevar, Matthew*Disclosed no conflict of interest.*

Kolipaka, Arunark*Disclosed no conflict of interest.*

Kolonin, Mikhail*Disclosed no conflict of interest.*

Kolz, Christopher*Disclosed no conflict of interest.*

Komatsu, David*Disclosed no conflict of interest.*

Komatsu, David E*Disclosed no conflict of interest.*

Komatsu, David E*Disclosed no conflict of interest.*

Komatsu, Takafumi*Disclosed no conflict of interest.*

Komenda, Jacob3A: Biorez.

Komistek, Richard D1: DePuy Synthes; 3B: DePuy Synthes.

Komistek, Richard D1: DePuy Synthes; 3B: DePuy Synthes.

Komori, Keiichiro*Disclosed no conflict of interest.*

Kon, Rachel E*Disclosed no conflict of interest.*

Konar, Subhajit*Disclosed no conflict of interest.*

Kondo, Akira*Disclosed no conflict of interest.*

Kondo, Eiji*Disclosed no conflict of interest.*

Kong, Alice PS*Disclosed no conflict of interest.*

König, Matthias A*Disclosed no conflict of interest.*

Konjas, Alexis.....*Disclosed no conflict of interest.*

Konnaris, Maxwell*Disclosed no conflict of interest.*

Konopka, Adam*Disclosed no conflict of interest.*

Kontaxis, Andreas*Disclosed no conflict of interest.*

Koopman, Bart.....*Disclosed no conflict of interest.*

Kops, Nicole*Disclosed no conflict of interest.*

Korcari, Antonion.....*Disclosed no conflict of interest.*

Korhonen, Rami*Disclosed no conflict of interest.*

Korhonen, Rami K*Disclosed no conflict of interest.*

Korhonen, Rami K.*Disclosed no conflict of interest.*

Korlewitz, Ryan J......*Disclosed no conflict of interest.*

Korley, Robert.....*Disclosed no conflict of interest.*

Kornmehl, Marcus*Disclosed no conflict of interest.*

Korntner, Stefanie H.*Disclosed no conflict of interest.*

Koroneos, Zachary Adam*Disclosed no conflict of interest.*

Kosber, Rashed L.....*Disclosed no conflict of interest.*

Kosonen, Joonas*Disclosed no conflict of interest.*

Kosugiyama, Hironobu.....*Disclosed no conflict of interest.*

Kotani, Toshiaki*Disclosed no conflict of interest.*

Kotelsky, Alexander*Disclosed no conflict of interest.*

Kouroupis, Dimitrios*Disclosed no conflict of interest.*

Kovacevic, David.....8: JBJS; 9: ASES, ORS.

Kowalski, Erik.....*Disclosed no conflict of interest.*

Kowalski, Michael*Disclosed no conflict of interest.*

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Kozar, Albert.....9: AOASM, OPC.

Kozar, Zachary Charles.....*Disclosed no conflict of interest.*

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Krahenbuhl, Nicola*Disclosed no conflict of interest.*

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Krueger, Benjamin*Disclosed no conflict of interest.*

Krueger, Chad*Disclosed no conflict of interest.*

Krueger, Chad A*Disclosed no conflict of interest.*

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Krzak, Joseph*Disclosed no conflict of interest.*
Krzak, Joseph J*Disclosed no conflict of interest.*
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Kucharski, Amir.....*Disclosed no conflict of interest.*
Kuchynsky, Kyle*Disclosed no conflict of interest.*
Kudo, Takamasa.....*Disclosed no conflict of interest.*
Kuenze, Christopher*Disclosed no conflict of interest.*
Kugel, Mara*Disclosed no conflict of interest.*
Kuliwaba, Julia S*Disclosed no conflict of interest.*
Kulyomina, Yuliya*Disclosed no conflict of interest.*
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Kumar, Deepak*Disclosed no conflict of interest.*
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Kurose, Yasuo*Disclosed no conflict of interest.*

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Kurtz, Steven.....2: Exponent; 3B: Exponent; 5: Celanese, Ceramtec, Ferring Pharmaceuticals, Invibio, Simplify Medical, Stryker, Wright Medical Technology, Zimmer Biomet; 6: Exponent.

Kurtz, Steven.....3B: Exponent, Inc.; 5: Celanese, CeramTec GmbH, Ferring Pharmaceuticals, Invibio, Simplify Medical, Stryker, Wright Medical Technology, Zimmer Biomet; 6: Exponent, Inc.

Kurtz, Steven M2: Exponent; 3B: Exponent; 5: Celanese, Ceramtec, Ferring Pharmaceuticals, Invibio, Simplify Medical, Stryker, Wright Medical Technology, Zimmer Biomet; 6: Exponent.

Kurtz, Steven M.2: Exponent Inc.; 3B: Exponent Inc.; 5: Celanese, Ceramtec, Ferring Pharmaceuticals, Invibio, Simplify Medical, Stryker, Wright Medical Technology, Zimmer-Biomet; 6: Exponent Inc.

Kurtz, Steven M.2: Exponent; 3B: Exponent; 5: Celanese, Ceramtec, Ferring Pharmaceuticals, Invibio, Simplify Medical, Stryker, Wright Medical Technology, Zimmer Biomet; 6: Exponent.

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Kuwashima, Umito*Disclosed no conflict of interest.*

Kuyl, Emile*Disclosed no conflict of interest.*

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Kuzuhara, Ryota.....*Disclosed no conflict of interest.*

Kwak, Daekyeung*Disclosed no conflict of interest.*

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Kwon, John Y.*Disclosed no conflict of interest.*

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Kwon, Young-Min5: 5- Stryker;5- Zimmer Biomet; 5- Depuy;5- Corentec; 5- Smith&Nephew.

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Kyriacou, Harry*Disclosed no conflict of interest.*

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Labonte, David*Disclosed no conflict of interest.*

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Lacheta, Lucca*Disclosed no conflict of interest.*

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Ladd, Amy4: Loci Orthopedics.

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Ladd, Bryan M.*Disclosed no conflict of interest.*

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Lai, Alon*Disclosed no conflict of interest.*

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Lam, Aaron*Disclosed no conflict of interest.*

Lam, Kanrick C*Disclosed no conflict of interest.*

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Lam, Tsz Ping*Disclosed no conflict of interest.*

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Lambers, Floor M3A: Stryker.

Lambrechts, Mark J*Disclosed no conflict of interest.*

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Lamontagne, Mario3B: MicroPort Orthopedics Inc; 5: MicroPort Orthopedics Inc, Smith and Nephew Orthopaedics AG.

Lamoure, Emma*Disclosed no conflict of interest.*

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Landgren, Marcus*Disclosed no conflict of interest.*

Landy, David*Disclosed no conflict of interest.*

Lane, Lewis B*Disclosed no conflict of interest.*

Lane, Ryan A*Disclosed no conflict of interest.*

Lang, Annemarie*Disclosed no conflict of interest.*

Lang, Gernot M*Disclosed no conflict of interest.*

Lang, McDaniel H.*Disclosed no conflict of interest.*

Langgartner, Dominik*Disclosed no conflict of interest.*

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Lanske, Beate3A: Radius Health Inc; 4: Radius Health Inc.

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Lanting, Brent3B: DePuy, IntelliJoint, Smith & Nephew, Stryker; 4: IdealFit Spacer Technologies; 5: DePuy, Smith & Nephew, Stryker; 6: DePuy, Smith & Nephew, Stryker, Zimmer.

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Latta, Loren L*Disclosed no conflict of interest.*

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Leary, Emily V7B: BMJ Journals; 8: Thieme, BMJ Journals.

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Lee, Gwo-Chin.....*3B: Corin USA, Heron Therapeutics, Stryker; 5: Ferring Therapeutics, KCI, Smith & Nephew, United Orthopedics; 8: Clinical Orthopaedics and Related Research, Journal of Arthroplasty, Journal of Bone and Joint Surgery, Orthopedics, SLACK Incorporated; 9: AAOS.*

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Lee, Hyunyeol*Disclosed no conflict of interest.*

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Lee, Kyoung-Mi.....*Disclosed no conflict of interest.*

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Lee, Oscar Kuang-Sheng.....*Disclosed no conflict of interest.*

Lee, Peter.....*Disclosed no conflict of interest.*

Lee, Peter VS.....5: DePuy Synthes Inc, USA, Materialise, Belgium, Beijing Naton Institute of Medical Technology; 6: DePuy Synthes Inc, USA, Materialise, Belgium, Beijing Naton Institute of Medical Technology; 7B: Deputy Editor, Journal of Orthopaedic Surgery and Research, BMC, Springer Nature; 8: Deputy Editor, Journal of Orthopaedic Surgery and Research, BMC, Springer Nature.

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Li, Chenxi3A: Smith & Nephew; 4: Smith & Nephew.

Li, Dan*Disclosed no conflict of interest.*

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Li, Hongshuai*Disclosed no conflict of interest.*

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Lin, Albert3B: Wright, Arthrex.

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Lin, Albert3B: Arthrex Inc; 8: KSSTA; 9: AAOS, ASES, AOSSM, AOA.

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Lin, Andrew*Disclosed no conflict of interest.*

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Lin, Tzuhua.....*Disclosed no conflict of interest.*
Lin, Tzu-hua*Disclosed no conflict of interest.*
Lin, Xi*Disclosed no conflict of interest.*
Lin, Yi-Shan*Disclosed no conflict of interest.*
Lin, Yu Ting.....*Disclosed no conflict of interest.*
Lin, Zixuan.....*Disclosed no conflict of interest.*
Lindberg, Emily*Disclosed no conflict of interest.*
Linde, Monica*Disclosed no conflict of interest.*
Linde, Monica A*Disclosed no conflict of interest.*
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Lindsey, Ronald W*Disclosed no conflict of interest.*
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Ling, Kenny*Disclosed no conflict of interest.*
Link, Thomas M.....*Disclosed no conflict of interest.*
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Liphardt, Anna-Maria.....*Disclosed no conflict of interest.*
Lipiski, Miriam*Disclosed no conflict of interest.*
Lisee, Caroline.....*Disclosed no conflict of interest.*
Lisiewski, Lauren.....*Disclosed no conflict of interest.*
Lisonbee, Rich J.....*Disclosed no conflict of interest.*
Lisonbee, Rich J.....*Disclosed no conflict of interest.*
List, Renate5: Medacta.
Listopadzki, Thomas R*Disclosed no conflict of interest.*
Little, Christopher B5: Bone Ligament Tendon.
Liu, Andrew.....*Disclosed no conflict of interest.*
Liu, Bei*Disclosed no conflict of interest.*
Liu, Chao*Disclosed no conflict of interest.*
Liu, Chuanju*Disclosed no conflict of interest.*
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Liu, Cunren.....*Disclosed no conflict of interest.*

Liu, Ethan J.....*Disclosed no conflict of interest.*

Liu, Guanglu.....*Disclosed no conflict of interest.*

Liu, Jessica Z.....*Disclosed no conflict of interest.*

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Liu, Jiawei.....*Disclosed no conflict of interest.*

Liu, Jie.....*Disclosed no conflict of interest.*

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Loeser, Richard F.....*3B: UNITY Biotechnology.*

Lofgren, Alicia L.....*Disclosed no conflict of interest.*

Loftus, Hannah.....*3A: DiscGenics; 4: DiscGenics.*

Logan, Alyssa A.*Disclosed no conflict of interest.*

Logeart-Avramoglou, Delphine.*Disclosed no conflict of interest.*

Lohre, Ryan.....*Disclosed no conflict of interest.*

Loiselle, Alayna*Disclosed no conflict of interest.*

Loiselle, Alayna E.*Disclosed no conflict of interest.*

Lombardi, Joseph M.....*Disclosed no conflict of interest.*

Lombardo, Salvo D.....*Disclosed no conflict of interest.*

Long, Greta E.....*Disclosed no conflict of interest.*

Long, Jason*Disclosed no conflict of interest.*

Long, Zeling.....*Disclosed no conflict of interest.*

Loots, Gabriela G*Disclosed no conflict of interest.*

Lopes, Erika Barboza Prado.....*Disclosed no conflict of interest.*

Lopez, Consuelo*Disclosed no conflict of interest.*

Lopez, Juan*Disclosed no conflict of interest.*

Lopez, Juan D*Disclosed no conflict of interest.*

Lopez, Kelsie*Disclosed no conflict of interest.*

Lopez, Mandi*Disclosed no conflict of interest.*

Lopez, Mandi J*Disclosed no conflict of interest.*

Lopez, Serafina G*Disclosed no conflict of interest.*

Lopez, Victor A*Disclosed no conflict of interest.*

Lorente, Ana I*Disclosed no conflict of interest.*

Lotz, Jeffrey*Disclosed no conflict of interest.*

Lotz, Jeffrey C1: Relievant MedSystems, Nocimed, LLC; 2: Relievant MedSystems; 3C: Relievant MedSystems, Nocimed, Bioniks; 4: Relievant MedSystems, Nocimed, Bioniks; 7A: Relievant MedSystems, Nocimed, LLC; 8: Deputy editor for the journal Spine.

Louwagie, Erin M*Disclosed no conflict of interest.*

Lovejoy, John*Disclosed no conflict of interest.*

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Low, Philip S4: On target labs, Novosteo inc, Umoja, Eradivir, Erthrocare; 5: Novartis, On target Labs, Umoja.

Low, Stew A3A: Novosteo Inc; 4: Novosteo Inc.

Lowen, Jeremy*Disclosed no conflict of interest.*

Lowenberg, David*Disclosed no conflict of interest.*

Lowery, Michael*Disclosed no conflict of interest.*

Lowman, Anthony3B: ReGelTec Inc; 4: ReGelTec Inc; 6: ReGelTec Inc.

Loy, Doug A*Disclosed no conflict of interest.*

Lu, Aiping*Disclosed no conflict of interest.*

Lu, Amy*Disclosed no conflict of interest.*

Lu, Helen H*Disclosed no conflict of interest.*

Lu, Jinxiu*Disclosed no conflict of interest.*

Lu, Qinghua*Disclosed no conflict of interest.*

Lu, Shuting*Disclosed no conflict of interest.*

Lu, X. Lucas*Disclosed no conflict of interest.*

Lu, Yan*Disclosed no conflict of interest.*

Lu, You*Disclosed no conflict of interest.*

Lu, Zhen5: DePuy Orthopaedics, Orthofix, Microport, Nuvasive, NIH.

Lubberts, Bart5: Arthrex, Butterfly Network.

Luczak, Meredith G*Disclosed no conflict of interest.*

Ludvig, Daniel*Disclosed no conflict of interest.*

Ludwick, Leanne*Disclosed no conflict of interest.*

Ludwig, Kai D*Disclosed no conflict of interest.*

Lue, Tom F*Disclosed no conflict of interest.*

Lufkin, Thomas*Disclosed no conflict of interest.*

Lui, Elaine*Disclosed no conflict of interest.*

Luis, Justin*Disclosed no conflict of interest.*

Luk, Connie*Disclosed no conflict of interest.*

Luk, Josephine*Disclosed no conflict of interest.*

Lukas, Christoph*Disclosed no conflict of interest.*

Lum, Zachary.....*Disclosed no conflict of interest.*

Lundberg, Hannah5: Zimmer Biomet.

Lundberg, Hannah J5: Zimmer Biomet.

Lundberg, Hannah J.5: Zimmer Biomet.

Lung, Brandon.....*Disclosed no conflict of interest.*

Lunkes, Douglas Janiel*Disclosed no conflict of interest.*

Luo, David T.*Disclosed no conflict of interest.*

Luo, Lijun*Disclosed no conflict of interest.*

Lutas, Maria*Disclosed no conflict of interest.*

Lutnick, Ellen.....*Disclosed no conflict of interest.*

Lv, Zheng-Tao.....*Disclosed no conflict of interest.*

Lycke, Roy.....*Disclosed no conflict of interest.*

Lyle, Mark A......*Disclosed no conflict of interest.*

Lynch, John A.....*Disclosed no conflict of interest.*

Lynch, Kelli.....3A: NuVasive.

Lynch, Kevin J.....*Disclosed no conflict of interest.*

Lyons, Lucas P.*Disclosed no conflict of interest.*

Ma, C Benjamin.....*Disclosed no conflict of interest.*

Ma, Chi*Disclosed no conflict of interest.*

Ma, Dongzhu.....*Disclosed no conflict of interest.*

Ma, Jin*Disclosed no conflict of interest.*

Ma, Junxuan*Disclosed no conflict of interest.*

Ma, Ricahrd5: Cartiheal, Moximed; 8: Journal of Bone and Joint Surgery – American;
9: American Orthopaedic Association, AOSSM, Orthopaedic Research Society, Rugby Research Injury
Prevention Group.

Ma, Richard5: Cartiheal, Moximed; 8: Journal of Bone and Joint Surgery – American;
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Ma, Wen Ao.....*Disclosed no conflict of interest.*

Ma'ayan, Avi.....*Disclosed no conflict of interest.*

Macaluso, Bonnie*Disclosed no conflict of interest.*

MacDonald, Daniel W*Disclosed no conflict of interest.*

MacDonald, Daniel W......*Disclosed no conflict of interest.*

Macdonald, Warren.....*Disclosed no conflict of interest.*

MacDowell, Arthur Jr.....*Disclosed no conflict of interest.*

MacEwen, Matthew.....*Disclosed no conflict of interest.*

MacEwen, Matthew R*Disclosed no conflict of interest.*

Macfarlane, Alexander*Disclosed no conflict of interest.*

Machida, Kazuya.....*Disclosed no conflict of interest.*

Machnicki, Allison L.*Disclosed no conflict of interest.*

MacInnis, Bailey.....*Disclosed no conflict of interest.*

Mack, Christina D.....3A: serve as consultant and PI for studies conducted by orthopedic
device manufactures, paid for indirectly to their full-time employer IQVIA.

Mack, Wendy J.....*Disclosed no conflict of interest.*

Mackay, Matt*Disclosed no conflict of interest.*

Mackay, Matthew.....*Disclosed no conflict of interest.*

MacKinnon, Kristen*Disclosed no conflict of interest.*

MacLeod, James N*Disclosed no conflict of interest.*

MacWilliams, Bruce A*Disclosed no conflict of interest.*

Madry, Henning*Disclosed no conflict of interest.*

Madsen, Josh4: JM is the CTO of GenAssist, Inc.

Maduka, Chima Victor*Disclosed no conflict of interest.*

Maeda, Masataka*Disclosed no conflict of interest.*

Maeda, Tasunori*Disclosed no conflict of interest.*

Maeda, Tatsunori*Disclosed no conflict of interest.*

Maeda, Toshihisa*Disclosed no conflict of interest.*

Maekawa, Hirotsugu*Disclosed no conflict of interest.*

Maenaka, Katsumi*Disclosed no conflict of interest.*

Maerz, Tristan*Disclosed no conflict of interest.*

Maglio, Melania7A: This study was funded by Fidia Farmaceutici.

Magneli, Martin*Disclosed no conflict of interest.*

Mah, Eugene*Disclosed no conflict of interest.*

Mahatma, Mohit M*Disclosed no conflict of interest.*

Maher, Patrick L*Disclosed no conflict of interest.*

Maher, Suzanne4: Agelity Biomechanics LLC; Hydro-Gen LLC; 9: Orhtopaedic Research Society.

Mahmood, Aatif*Disclosed no conflict of interest.*

Mahmood, Bilal*Disclosed no conflict of interest.*

Mahoney, Ormonde3B: Stryker.

Mahtani, Gordhan*Disclosed no conflict of interest.*

Mahtani, Gordhan B*Disclosed no conflict of interest.*

Mahtani, Gordhan B.*Disclosed no conflict of interest.*

Mai, Wilfried*Disclosed no conflict of interest.*

Main, Russell P*Disclosed no conflict of interest.*

Mair, Scott5: Smith & Nephew.

Majeska, Robert*Disclosed no conflict of interest.*

Majima, Tokifumi*Disclosed no conflict of interest.*

Majumdar, Sharmila5: GE Healthcare, Samumed.

Majumdar, Sharmila5: GE Healthcare.

Mäkelä, Janne T. A......*Disclosed no conflict of interest.*

Makhni, Eric C.....2: Xodus Medical; 3B: Smith & Nephew; 7B: Springer; 9: American Orthopaedic Society for Sports Medicine.

Makida, Kazuya.....*Disclosed no conflict of interest.*

Makosa, Dawid*Disclosed no conflict of interest.*

Malany, PhD, Siobhan.....4: Micro-gRx, Orlando, FL; 5: Micro-gRx, Orlando, FL; 6: Micro-gRx, Orlando, FL.

Malbouby, Vahid*Disclosed no conflict of interest.*

Malchau, Henrik1: MAKO/Stryker; 3C: Zimmer/Biomet, DePuy; 5: Zimmer/Biomet, DePuy.

Maldonado, Marcia*Disclosed no conflict of interest.*

Malfait, Anne-Marie3B: Eli Lilly, Pfizer, Vizuri, Ceva, Vetoquinol.

Malhotra, Neil R......*Disclosed no conflict of interest.*

Malige, Ajith*Disclosed no conflict of interest.*

Malik, Azeem Tariq*Disclosed no conflict of interest.*

Malik, Jeremy3A: NuVasive.

Malkani, Arthur L......2: Stryker; 3B: Stryker; 5: Stryker; 7A: Stryker; 8: Journal of Arthroplasty.

Mallinos, Alexandria D......*Disclosed no conflict of interest.*

Mallow, Murphy*Disclosed no conflict of interest.*

Malloy, Philip.....*Disclosed no conflict of interest.*

Maloney, Erin E......*Disclosed no conflict of interest.*

Mamouei, Zeinab.....*Disclosed no conflict of interest.*

Manal, Kurt.....*Disclosed no conflict of interest.*

Manasherob, Robert.....*Disclosed no conflict of interest.*

Mancino, Chiara.....*Disclosed no conflict of interest.*

Mancuso, Megan E*Disclosed no conflict of interest.*

Mandalapu, Sai*Disclosed no conflict of interest.*

Mandell, Jonathan*Disclosed no conflict of interest.*

Mandell, Jonathan B*Disclosed no conflict of interest.*

Mandl, Lisa*Disclosed no conflict of interest.*

Mane, Amitkumar M3A: DePuy Synthes; 4: DePuy Synthes.

Mane, Amitkumar M.3A: DePuy Synthes; 4: DePuy Synthes.

Mani, Saandeep.....3A: Zimmer Biomet; 4: Zimmer Biomet.

Mann, Kenneth A.....8: JOR Publications Advisory Board.

Mannarino, Matthew*Disclosed no conflict of interest.*

Mannava, Sandeep*Disclosed no conflict of interest.*

Mannen, Erin*Disclosed no conflict of interest.*

Mannen, Erin M*Disclosed no conflict of interest.*

Manner, Paul*Disclosed no conflict of interest.*

Manner, Paul A.....8: Clinical Orthopaedics and Related Research.

Manske, Sarah L.....*Disclosed no conflict of interest.*

Mansky, Kim*Disclosed no conflict of interest.*

Manto, Kristen.....*Disclosed no conflict of interest.*

Manzer, Melissa.....*Disclosed no conflict of interest.*

Mao, Xiao*Disclosed no conflict of interest.*

Marchand, Kevin.....*Disclosed no conflict of interest.*

Marchand, Robert.....2: Stryker; 3B: Stryker; 4: Stryker; 5: Stryker.

Marchand, Robert.....3B: Stryker, Zipline, Onetrax; 4: Stryker; 5: Stryker.

Marchand, Robert C......3B: Stryker, Zipline, Onetrax; 4: Stryker; 5: Stryker.

Marchetta, Kara.....*Disclosed no conflict of interest.*

Marcolongo, Michele*Disclosed no conflict of interest.*

Marcucio, Ralph.....*Disclosed no conflict of interest.*

Marcucio, Ralph S*Disclosed no conflict of interest.*

Marder, MD, Richard A*Disclosed no conflict of interest.*

Marecek, Geoffrey S3B: BoneSupport AB, Globus Medical, Nuvasive, Smith & Nephew, Stryker, Synthes, Zimmer; 5: BoneSupport AB; 9: Orthopaedic Trauma Association, Western Orthopaedic Association.

Marette, Shelly*Disclosed no conflict of interest.*

Margalik, Denis.....*Disclosed no conflict of interest.*

Margolis, David.....*Disclosed no conflict of interest.*

Margolis, David S*Disclosed no conflict of interest.*

Margulis, Arkady.....*Disclosed no conflict of interest.*

Marinier, Michael Christian*Disclosed no conflict of interest.*

Markel, David*Disclosed no conflict of interest.*

Markel, Mark*Disclosed no conflict of interest.*

Markhardt, Brian K*Disclosed no conflict of interest.*

Markway, Brandon*Disclosed no conflict of interest.*

Marmillon, Cédric*Disclosed no conflict of interest.*

Marra, Marco.....*Disclosed no conflict of interest.*

Marrero, Louis*Disclosed no conflict of interest.*

Marrero, Luis*Disclosed no conflict of interest.*

Marrero, PhD, Luis*Disclosed no conflict of interest.*

Marsh, J. Lawrence*Disclosed no conflict of interest.*

Marsh, Mike.....*Disclosed no conflict of interest.*

Marshall, Brittany P*Disclosed no conflict of interest.*

Marshall, James H.....*Disclosed no conflict of interest.*

Marshall, Samantha.....*Disclosed no conflict of interest.*

Martensson, Nicole.....*Disclosed no conflict of interest.*

Martin, Brian3A: Exactech Inc.

Martin, C Ryan*Disclosed no conflict of interest.*

Martin, C. Ryan.....*Disclosed no conflict of interest.*

Martin, James A.....*Disclosed no conflict of interest.*

Martin, John3B: DiscGenics, Inc.

Martin, John T.....3B: DiscGenics, Inc.

Martin, Nicholas3A: NuVasive.

Martin, R. Kyle6: Arthrex, Linvatec, Mitek, Smith and Nephew.

Martin, Ryan.....*Disclosed no conflict of interest.*

Martin, Scott D*Disclosed no conflict of interest.*

Martin, Stephen.....*Disclosed no conflict of interest.*

Martin, Stephen A.....*Disclosed no conflict of interest.*

Martinazzi, Brandon*Disclosed no conflict of interest.*

Martinez, Anna*Disclosed no conflict of interest.*

Martinez, Jessica*Disclosed no conflict of interest.*

Martinez, Saul*2: Exactech Inc, LINK, Smith and Nephew; 3B: Exactech Inc; 5: Exactech Inc, AO Foundation.*

Martyniak, Kari*Disclosed no conflict of interest.*

Maruyama, Masahiro*Disclosed no conflict of interest.*

Marvin, Jason C*Disclosed no conflict of interest.*

Marzo, John*Disclosed no conflict of interest.*

Masahashi, Naoya*Disclosed no conflict of interest.*

Masamitsu, Kido*Disclosed no conflict of interest.*

Masataka, Minami*Disclosed no conflict of interest.*

Maslow, Jed I*Disclosed no conflict of interest.*

Mason, Deborah*9: Current British Orthopaedic Research Society (BORS) president.*

Mason, Deborah J*Disclosed no conflict of interest.*

Massaro, Matteo*Disclosed no conflict of interest.*

Massey, Patrick A*Disclosed no conflict of interest.*

Massie, Christine*Disclosed no conflict of interest.*

Masters, Elysia A*Disclosed no conflict of interest.*

Masuda, Koichi*5: AnGes Inc.*

Masumoto, Jun*Disclosed no conflict of interest.*

Matelski, John*Disclosed no conflict of interest.*

Mathai, Bertin*Disclosed no conflict of interest.*

Matharoo, Jashanjeet*Disclosed no conflict of interest.*

Mather, Richard C*3B: Stryker.*

Mathew, Mathew*7A: MicroPort Ortho.*

Mathew, Mathew T*7A: MicroPort Ortho.*

Mathew, Mathew T.*7A: MicroPort Orthopedic Inc.*

Mathey, Elizabeth*Disclosed no conflict of interest.*

Mathieu, Colleen*Disclosed no conflict of interest.*

Mathis, Kenneth*3B: Joint Development.*

Mathis, Kenneth B.3B: Joint Development.

Mathkar, Pranav*Disclosed no conflict of interest.*

Matsubara, **Shinji** *Disclosed no conflict of interest.*

Matsubara, Shinji.....*Disclosed no conflict of interest.*

Matsuda, Hideki.....*Disclosed no conflict of interest.*

Matsuda, Hidetoshi*Disclosed no conflict of interest.*

Matsuda, Shuichi*Disclosed no conflict of interest.*

Matsui, Yuichiro.....*Disclosed no conflict of interest.*

Matsui, Yuki.....*Disclosed no conflict of interest.*

Matsumae, Gen*Disclosed no conflict of interest.*

Matsumoto, koji*Disclosed no conflict of interest.*

Matsumoto, Morio*Disclosed no conflict of interest.*

Matsumoto, Taro.....*Disclosed no conflict of interest.*

Matsumoto, Tomoyuki*Disclosed no conflict of interest.*

Matsunami, Sansui*Disclosed no conflict of interest.*

Matsuoka, Masatake*Disclosed no conflict of interest.*

Matsushita, Masaki*Disclosed no conflict of interest.*

Matsushita, Takehiko*Disclosed no conflict of interest.*

Matsuyama, Junya.....*Disclosed no conflict of interest.*

Matsuyama, Yuki*Disclosed no conflict of interest.*

Matta, Joel M......*Disclosed no conflict of interest.*

Mattar, Luke T*Disclosed no conflict of interest.*

Matthew, Robert P*Disclosed no conflict of interest.*

Mattingly, Brett*Disclosed no conflict of interest.*

Matuska, Andrea3A: Arthrex, Inc.

Matuszewski, Lucas-Maximilian *Disclosed no conflict of interest.*

Mauck, Robert8: RLM (8, JOR Spine), no other disclosures.

Mauck, Robert8: Co-Editor for JOR Spine.

Mauck, Robert L......8: JOR Spine.

Mauck, Robert L......4: Mechano-Therapeutics LLC; 8: JOR Spine.

Mauck, Robert L......8: Co-Editor of JOR Spine.

Mauck, Robert L......*Disclosed no conflict of interest.*

Mauck, Roberto L......8: JOR Spine.

Mayer, Bruce*Disclosed no conflict of interest.*

Mayman, David.....1: OrthAlign, Smith & Nephew; 2: Smith & Nephew; 3B: Smith & Nephew; 4: Imagen, Insight, OrthAlign, Wishbone; 5: Smith & Nephew; 9: Knee Society.

Maza-Frechín, Mario.....*Disclosed no conflict of interest.*

Mazda, Osam.....*Disclosed no conflict of interest.*

Mazda, Yusuke.....*Disclosed no conflict of interest.*

Mazuchi, Flavia A.S......*Disclosed no conflict of interest.*

Mazzari, Giulia*Disclosed no conflict of interest.*

Mbachu, Ephriam*Disclosed no conflict of interest.*

Mbalaviele, Gabriel.....3B: Aclaris Therapeutics, Inc.; 4: Aclaris Therapeutics, Inc.

McAlinden, Audrey8: Yes.

McAllister, Kyron*Disclosed no conflict of interest.*

Mcallister, Scott.....*Disclosed no conflict of interest.*

McBeath, Rowena.....*Disclosed no conflict of interest.*

McBride-Gagy, Sara*Disclosed no conflict of interest.*

McBroom, Trevor J......*Disclosed no conflict of interest.*

McCabe, Megan.....*Disclosed no conflict of interest.*

McCarthy, Andrea.....*Disclosed no conflict of interest.*

McCarthy, Christina Teresa*Disclosed no conflict of interest.*

McCarthy, Helen E*Disclosed no conflict of interest.*

McCarthy, Stephanie M*Disclosed no conflict of interest.*

McCarthy, Stephanie M.*Disclosed no conflict of interest.*

McCarthy, Thomas.....3A: Stryker employee; 4: Stryker Corp.

McCarty, Colin P*Disclosed no conflict of interest.*

McChesney, Grant R*Disclosed no conflict of interest.*

McClellan, Phillip*Disclosed no conflict of interest.*

McClendon, Mark*Disclosed no conflict of interest.*

McClincy, Michael1: Elizur LLC.

McClincy, Micheal P*Disclosed no conflict of interest.*

McCloud, Darby*Disclosed no conflict of interest.*

McClure, Michael6: Musculoskeletal Transplant Foundation.

McClure, Michael J6: MTF Biologics.

McCool, Jillian L*Disclosed no conflict of interest.*

McCool, Jillian L*Disclosed no conflict of interest.*

McCormack, Robert*Disclosed no conflict of interest.*

McCormack, Thomas J*Disclosed no conflict of interest.*

Mcculloch, Patrick.....*Disclosed no conflict of interest.*

McCutcheon, Sean*Disclosed no conflict of interest.*

McDonald, Christopher*Disclosed no conflict of interest.*

McDowell IV, Thomas W3A: DePuy Synthes.

McDowell, Arthur J*Disclosed no conflict of interest.*

McDowell, Susan M.*Disclosed no conflict of interest.*

McFadden, Erin*Disclosed no conflict of interest.*

McFaline-Figueroa, Jennifer.....*Disclosed no conflict of interest.*

McGale, Jance G.....*Disclosed no conflict of interest.*

McGee-Lawrence, Meghan*Disclosed no conflict of interest.*

McGee-Lawrence, Meghan E*Disclosed no conflict of interest.*

McGee-Lawrence, Meghan E. ...*Disclosed no conflict of interest.*

McGowan, Alyssa M*Disclosed no conflict of interest.*

McGrath, Brian3B: Smith & Nephew.

McGrath, James*Disclosed no conflict of interest.*

McGrath, Thomas M*Disclosed no conflict of interest.*

McGrath, Tom.....*Disclosed no conflict of interest.*

McGuire, Flynn*Disclosed no conflict of interest.*

McHardy, Paul*Disclosed no conflict of interest.*

McIff, Terence E.*Disclosed no conflict of interest.*

McIlwraith, C Wayne3B: Arthrex; 4: Advanced Regenerative Therapies.

McIlwraith, C. Wayne*Disclosed no conflict of interest.*

McIlwraith, Wayne*Disclosed no conflict of interest.*

McIver, Natalia*Disclosed no conflict of interest.*

McKenzie, Jennifer.....*Disclosed no conflict of interest.*

McKenzie, Jennifer A*Disclosed no conflict of interest.*

McMahon, Patrick J*Disclosed no conflict of interest.*

McMurry, Tim*Disclosed no conflict of interest.*

McNamara, Laoise M*Disclosed no conflict of interest.*

McNamara, Stephanie L.....*Disclosed no conflict of interest.*

McNary, PhD, Sean*Disclosed no conflict of interest.*

McNeill, Tyler J*Disclosed no conflict of interest.*

McNulty, Amy*8: Connective Tissue Research.*

McNulty, Amy L*8: Connective Tissue Research.*

McNulty, Amy L.*8: Connective Tissue Research.*

McWalter, Emily J*Disclosed no conflict of interest.*

Mease, Joshua*Disclosed no conflict of interest.*

Meckmongkol, Teerin*Disclosed no conflict of interest.*

Meehan, John*Disclosed no conflict of interest.*

Meek, Wendy M*Disclosed no conflict of interest.*

Mehringer, Noah J.*3A: DePuy Synthes.*

Mehta, Amisha*Disclosed no conflict of interest.*

Mehta, Bella*Disclosed no conflict of interest.*

Mehta, Nabil.....*Disclosed no conflict of interest.*

Mehta, Samir*Disclosed no conflict of interest.*

Meldosian, Aleen L*Disclosed no conflict of interest.*

Mell, Steven P.....*Disclosed no conflict of interest.*

Mella, Giovanni.....*Disclosed no conflict of interest.*

Mellon, Stephen J.*Disclosed no conflict of interest.*

Melnic, Christopher M*Disclosed no conflict of interest.*

Melo, Luana*Disclosed no conflict of interest.*

Melvin, Patricia R.....*Disclosed no conflict of interest.*

Menarim, Bruno C.....*Disclosed no conflict of interest.*

Mendez, Melanie E*Disclosed no conflict of interest.*

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Mengoni, Marlène9: Board of director - VPH institute, UK chapter.

Mengsteab, Paulos Y.....*Disclosed no conflict of interest.*

Menon, Nathan.....*Disclosed no conflict of interest.*

Menuey, Elizabeth M......*Disclosed no conflict of interest.*

Mercer, Deana*Disclosed no conflict of interest.*

Mesfin, Addisu.....5: AO Spine, Globus Medical.

Mesfin, Addisu.....5: AO Spine, Globus; 9: SRS, NASS, CSRS, AAOS, AOA, J Robert Gladden Orthopedic Society.

Messamore, William*Disclosed no conflict of interest.*

Messenger, Elizabeth D.....*Disclosed no conflict of interest.*

Metcalf, Rory*Disclosed no conflict of interest.*

Metzger, Corinne E*Disclosed no conflict of interest.*

Metzger, Gregory J.....*Disclosed no conflict of interest.*

Meulink, Steven L3A: Zimmer Biomet; 4: Zimmer Biomet.

Meyer, Gretchen.....*Disclosed no conflict of interest.*

Meyer, Gretchen A.*Disclosed no conflict of interest.*

Meyers, Carolyn A.....*Disclosed no conflict of interest.*

Meyers, James H*Disclosed no conflict of interest.*

Meyler, Ella.....*Disclosed no conflict of interest.*

Meynen, Alexander*Disclosed no conflict of interest.*

Miamidian, John3A: Zimmer Biomet.

Miao, Zhen.....*Disclosed no conflict of interest.*

Michael, Getty*Disclosed no conflict of interest.*

Michalek, Arthur J.....*Disclosed no conflict of interest.*

Michaud, John B*Disclosed no conflict of interest.*

Michel, Hassler3A: Wright Medical Ltd.

Michel, Jonathan*Disclosed no conflict of interest.*

Mickle, Alyssa R*Disclosed no conflict of interest.*

Miclau III, Theodore.....*3B: Amgen, Bone Therapeutics, Arquos, Surrozen, DePuy; 9: OTA.*

Miclau, Theodore.....*3B: Arquos: Paid consultant; Stock or stock Options, Bone Therapeutics: Paid consultant, NXTSENS: Paid consultant, Surrozen: Paid consultant, Synthes: Paid consultant; 6: Globus Medical: Other financial or material support, KCI: Other financial or material support; 9: AO Foundation: Board or committee member, Baxter: Research support, Inman Abbott Society: Board or committee member, International Combined Orthopaedic Research Societies: Board or committee member, International Orthopaedic Trauma Association: Board or committee member, Orthopaedic Research Society: Board or committee member, Orthopaedic Trauma Association: Board or committee member, Osteosynthesis and Trauma Care Foundation: Board or committee member, , San Francisco General Hospital Foundation: Board or committee member.*

Miclau, Theodore.....*3B: Amgen, Bone Therapeutics, Arquos, Surrozen, DePuy; 5: Baxter; 9: Inman Abbott, iCORS, Osteosynthesis & Trauma Care Foundation, AO Foundation/AO Research Institute Advisory Committee, iOTA.*

Miclau, Theodore.....*3B: Amgen, Bone Therapeutics, Arquos, Surrozen, DePuy; 5: Baxter; 9: Inman Abbott Society, Orthopaedic Research Society, International Combined Orthopaedic Research Societies.*

Miclau, Theodore.....*3B: Arquos: Paid consultant; Stock or stock Options, Bone Therapeutics: Paid consultant, NXTSENS: Paid consultant, Surrozen: Paid consultant, Synthes: Paid consultant; 6: Baxter: Research support, Globus Medical: Other financial or material support, KCI: Other financial or material support, Stryker: Other financial or material support; 9: AO Foundation: Board or committee member, Inman Abbott Society: Board or committee member, International Combined Orthopaedic Research Societies: Board or committee member International Orthopaedic Trauma Association: Board or committee member, Orthopaedic Research Society: Board or committee member, Orthopaedic Trauma Association: Board or committee member, Osteosynthesis and Trauma Care Foundation: Board or committee member, , San Francisco General Hospital Foundation: Board or committee member.*

Middendorf, Jill M*Disclosed no conflict of interest.*

Middleton, Emily*Disclosed no conflict of interest.*

Midekssa, Firaol.....*Disclosed no conflict of interest.*

Midgaard, Kaare S.....*Disclosed no conflict of interest.*

Midtgaard, Kaare*Disclosed no conflict of interest.*

Mifune, Yutaka*Disclosed no conflict of interest.*

Migonney, Véronique*Disclosed no conflict of interest.*

Miguez, Sofia*Disclosed no conflict of interest.*

Miguez, Sofia M*Disclosed no conflict of interest.*

Mihalko, William1: Aesculap Inc; 3B: Aesculap Inc, Zimmer/Biomet; 7A: Aesculap Inc; 7B: Elsevier Inc; 8: J Orthop Res, J Arthroplasty, J Long Term Eff Med Implants, Orthop Clinics NA; 9: Campbell Foundation, AAOS, ORS, ASTM International, AAHKS, Knee Society, Hip Society.

Mihalko, William M1: Aesculap Inc; 3B: Aesculap Inc, Acura-Biosciences Inc, Zimmer/Biomet; 7A: Aesculap Inc; 7B: Elsevier Inc; 8: Journal of Orthopaedic Research, Journal of Arthroplasty, Journal Long Term Effects of Medical Implants, Orthopaedic Clinics of North America; 9: Campbell Foundation, Orthopaedic Research Society, AAOS, ASTM International, AAHKS, , Knee Society, Hip Society.

Mihalko, William M1: Aesculap Inc; 3B: Aesculap Inc; 7A: Aesculap Inc; 7B: Elsevier Inc; 8: Journal of Orthopaedic Research, Journal of Arthroplasty, Journal Long Term Effects of Medical Implants, Orthopaedic Clinics of North America; 9: ORS, AAOS, ASTM International, AAHKS, Knee Society, Hip Society.

Mihalko, William M1: Aesculap Inc; 3B: Aesculap Inc, Zimmer/Biomet; 7A: Aesculap Inc; 7B: Elsevier Inc; 8: J Orthop Res, J Arthroplasty, J Long Term Eff Med Implants, Orthop Clinics NA; 9: Campbell Foundation, AAOS, ORS, ASTM International, AAHKS, Knee Society, Hip Society.

Mihelc, Kevin3A: Stryker.

Mikkonen, Santtu*Disclosed no conflict of interest.*

Mikos, Antonios.....*Disclosed no conflict of interest.*

Miles, Jon W.*Disclosed no conflict of interest.*

Miles, Jon Wesley*Disclosed no conflict of interest.*

Millecamps, Magali.....*Disclosed no conflict of interest.*

Miller, Andrew.....*Disclosed no conflict of interest.*

Miller, Andrew C.....*Disclosed no conflict of interest.*

Miller, Andy*Disclosed no conflict of interest.*

Miller, Benjamin C*Disclosed no conflict of interest.*

Miller, Benjamin F.....*Disclosed no conflict of interest.*

Miller, Catherine.....*Disclosed no conflict of interest.*

Miller, Christopher P.....*Disclosed no conflict of interest.*

Miller, Kirsten C*Disclosed no conflict of interest.*

Miller, M C*Disclosed no conflict of interest.*

Miller, Mark*Disclosed no conflict of interest.*

Miller, Mark A.....*Disclosed no conflict of interest.*

Miller, Mark C.....*Disclosed no conflict of interest.*

Miller, Mark Carl.....*Disclosed no conflict of interest.*

Miller, Rachel E*Disclosed no conflict of interest.*

Miller, Richard J*Disclosed no conflict of interest.*

Millet, Peter J*1: Arthrex, Inc, Medbridge; 3B: Arthrex, Inc; 4: VuMedi; 5: Arthrex, Inc, Ossur, Siemens, Smith & Nephew; 7B: Springer.*

Millett, Peter J*1: Arthrex, Medbridge royalties; 3B: Arthrex; 4: VuMedi; 5: Research supported by Steadman Philippon Research Institute - grant funding or in-kind donations from Arthrex, DJO, MLB, Ossur, Siemens, Canon, Smith & Nephew, XTRE & Dept of Defense.; 7B: Springer - book royalties.*

Millett, Peter J*1: Arthrex, Inc., Medbridge; 3B: Arthrex, Inc.; 4: VuMedi; 5: Arthrex, Inc., Ossur, Smith & Nephew, Siemens; 7B: Springer.*

Millett, Peter J.*1: Arthrex, Inc., Medbridge; 3B: Arthrex, Inc.; 4: VuMedi; 5: Arthrex, Inc., Ossur, Siemens, Smith & Nephew; 7B: Springer.*

Milligan, Ivy*Disclosed no conflict of interest.*

Milligan, Kenneth*Disclosed no conflict of interest.*

Minardi, Silvia*Disclosed no conflict of interest.*

Minegishi, Yuki*Disclosed no conflict of interest.*

Mingjian, Xu*Disclosed no conflict of interest.*

Miniaci, Anthony*1: Arthrosurface; 2: Arthrosurface; 3B: Arthrosurface, Trice; 4: DePuy, Medtronic, Zimmer, Stryker, Arthrosurface, Trice; 5: Arthrosurface; 6: Stryker, Arthrosurface; 7B: Wolters Kluwer Health - Lippincott Williams & Wilkins; 8: Wolters Kluwer Health - Lippincott Williams & Wilkins; 9: , American Shoulder and Elbow Surgeons, Arthroscopy Association of North America, American Orthopaedic Society for Sports Medicine.*

Minton, Dennis*Disclosed no conflict of interest.*

Mirochnik, Karina*Disclosed no conflict of interest.*

Mirza, Muhammad*Disclosed no conflict of interest.*

Mishima, Kenichi*Disclosed no conflict of interest.*

Mitchell, John*Disclosed no conflict of interest.*

Mitchell, Mary*Disclosed no conflict of interest.*

Mithcell, John*Disclosed no conflict of interest.*

Mitra, Indranath*Disclosed no conflict of interest.*

Mitsutake, Ryo*Disclosed no conflict of interest.*

Mittwede, Peter*Disclosed no conflict of interest.*

Miura, Yugo*Disclosed no conflict of interest.*

Miyaji, Takahiro*Disclosed no conflict of interest.*

Miyaki, Shigeru*Disclosed no conflict of interest.*

Miyamoto, Hiroki.....*Disclosed no conflict of interest.*

Miyamoto, Tomohiro.....*Disclosed no conflict of interest.*

Miyata, Kazuhiro.....*Disclosed no conflict of interest.*

Miyatake, Kazumasa*Disclosed no conflict of interest.*

Miyazaki, Kunihiko.....*Disclosed no conflict of interest.*

Miyazaki, Ryo.....*Disclosed no conflict of interest.*

Miyazaki, Shingo.....*Disclosed no conflict of interest.*

Miyazaki, Takuji*Disclosed no conflict of interest.*

Mizera, Megan M.....*Disclosed no conflict of interest.*

Mizuno, Shuichi*Disclosed no conflict of interest.*

Mizuno, Yoshihiro*Disclosed no conflict of interest.*

Moatshe, Gilbert.....*Disclosed no conflict of interest.*

Modler, Niels*Disclosed no conflict of interest.*

Mo einzadeh, Seyedsina*Disclosed no conflict of interest.*

Moeser, Adam J*Disclosed no conflict of interest.*

Mohamed, Mohamed F*Disclosed no conflict of interest.*

Mohamed, Nequesha S.....*Disclosed no conflict of interest.*

Mohammadi, Ali*Disclosed no conflict of interest.*

Mohanty, Ronak*Disclosed no conflict of interest.*

Mohanty, Sarthak*Disclosed no conflict of interest.*

Mojahed Yazdi, Reza.....*Disclosed no conflict of interest.*

Mojica Santiago, PhD, Jorge Alexis *Disclosed no conflict of interest.*

Mok, Anthony.....*Disclosed no conflict of interest.*

Mok, Anthony C.....*Disclosed no conflict of interest.*

Mok, Chan Hee*Disclosed no conflict of interest.*

Molino, Janine*Disclosed no conflict of interest.*

Mologne, Timothy S.....*3B: JRF Ortho, Samumed; 5: JRF Ortho.*

Molstad, David*Disclosed no conflict of interest.*

Molstad, David H.H.....*Disclosed no conflict of interest.*

Molstad, David HH.....*Disclosed no conflict of interest.*

Momenzadeh, Kaveh*Disclosed no conflict of interest.*

Momin, Aisha Azeem.....*Disclosed no conflict of interest.*

Momma, Daisuke.....*Disclosed no conflict of interest.*

Monaghan, Griffin*Disclosed no conflict of interest.*

Monibi, Farrah A.....*Disclosed no conflict of interest.*

Monk, A. Paul*Disclosed no conflict of interest.*

Mononen, Mika E.*Disclosed no conflict of interest.*

Mont, Michael*3B: Stryker Corp; 4: Stryker Corp; 6: Johnson & Johnson; 7A: Stryker Corp; 8: AAOS, AAHKS, Journal of Arthroplasty, Journal of Knee Surgery, Orthopaedics, Surgical Techniques International, Wolters Kluwer Health.*

Mont, Michael*1: Microport, Stryker; 3B: Cymedica, DJ Orthopaedics, Flexion Therapeutics, Johnson & Johnson, Ongoing Care Solutions, Orthosensor, Pacira, Peerwell, Performance dynamics, Pfizer, Skye Biologics, Stryker, Tissue Gene; 4: Peerwell, USMI; 5: DJ Orthopaedics, Johnson & Johnson, National Institutes of Health (NIAMS & NICHD), Ongoing Care Solutions, Orthosensor, Stryker, Tissue Gene; 7B: Medicus Works LLC, Up-to Date, Wolters Kluwer Health - Lippincott Williams & Wilkins; 8: Journal of Arthroplasty, Journal of Knee Surgery, Orthopedics, Surgical Techniques International; 9: AAOS, American Association of Hip and Knee Surgeons, Knee Society).*

Mont, Michael*3B: Cymedica, Flexion Therapeutics, Johnson and Johnson, Kolon TissueGene, Pacira, Pfizer, Stryker; 4: CERAS Health, MirrorAR, Peerwell, USMI; 5: Johnson and Johnson, National Institutes of Health (NIAMS & NICHD), RegenLab, Stryker, , TissueGene; 6: , Up-to Date; 7A: , Stryker; 7B: , Medicus Works LLC, Up-to Date, Wolters Kluwer Health - Lippincott Williams & Wilkins; 8: , Journal of Arthroplasty, Journal of Knee Surgery, Orthopedics, Surgical Techniques International; 9: , AAOS, American Association of Hip and Knee Surgeons, Knee Society.*

Mont, Michael A*3B: Cymedica, Flexion Therapeutics, Johnson & Johnson, Kolon, TissueGene, Pacira, Pfizer, Stryker; 4: CERAS Health, MirrorAR, Peerwell, USMI; 5: johnson & johnson, NIH, RegenLab, , Stryker, TissueGene; 7A: , Stryker; 7B: , Medicus Works LLC, Up-to Date, Wolter Kluwer Health; 8: , Journal of Arthroplasty, Journal of Knee Surgery, Orthopedics, Surgical Techniques International; 9: , AAOS, AAHKS, Knee Society.*

Mont, Michael A.*3B: Cymedica, Flexion Therapeutics, Johnson & Johnson, Kolon TissueGene, Pacira, Pfizer, Stryker; 4: Ceras Health, MirrorAR, Peerwell, USMI; 5: Johnson & Johnson, RegenLab, Stryker, TissueGene; 7A: , Stryker; 7B: , Medicus Works LLC, Up-to Date, Wolters Kluwer Health - Lippincott Williams & Wilkins; 8: , Journal of Arthroplasty, Journal of Knee Surgery, Orthopedics, Surgical Techniques International; 9: , AAOS, AAHKS, Knee Society.*

Mont, Michael A.*3B: Stryker.*

Montclare, Jin*Disclosed no conflict of interest.*

Monte, Willis S.....*Disclosed no conflict of interest.*

Monteiro, Maurício J.*Disclosed no conflict of interest.*

Montemurro, Nicholas J*Disclosed no conflict of interest.*

Montero, Angela.....*Disclosed no conflict of interest.*

Montgomery, Jessie A.....*Disclosed no conflict of interest.*

Montgomery, Liam*Disclosed no conflict of interest.*

Montgomery, Liam Anthony.....*Disclosed no conflict of interest.*

Moo, Eng Kuan.....*Disclosed no conflict of interest.*

Moody, Mikayla.....*Disclosed no conflict of interest.*

Moon, Hong Joo.....*Disclosed no conflict of interest.*

Mooney, David J5: Novartis.

Mooney, Jake.....*Disclosed no conflict of interest.*

Moore, Don K.....9: AAOS, Lumbar Spine Research Society, North American Spine Society.

Moore, Douglas C*Disclosed no conflict of interest.*

Moore, Jacob A.....*Disclosed no conflict of interest.*

Moore, Joseph*Disclosed no conflict of interest.*

Moore, Rebecca.....*Disclosed no conflict of interest.*

Moore, Shamika*Disclosed no conflict of interest.*

Moore-Lotridge, Stephanie N ...*Disclosed no conflict of interest.*

Moorman, Claude*Disclosed no conflict of interest.*

Mora, Keshia.....*Disclosed no conflict of interest.*

Mora, Keshia E.....*Disclosed no conflict of interest.*

Moradi, Babak*Disclosed no conflict of interest.*

Morales Yniguez, Francisco J.....*Disclosed no conflict of interest.*

Moran, Steven*Disclosed no conflict of interest.*

Moran, Steven L.....*Disclosed no conflict of interest.*

Morberg, Per*Disclosed no conflict of interest.*

Moré, Ari D.O.....*Disclosed no conflict of interest.*

Moré, Ari D.O.....*Disclosed no conflict of interest.*

Morejon, Andy.....*Disclosed no conflict of interest.*

Moreno, Michael R*Disclosed no conflict of interest.*

Morgan, Elise F7B: Journal of Biomechanics.

Morgan, Oliver.....*Disclosed no conflict of interest.*

Mori, Akiyoshi.....*Disclosed no conflict of interest.*

Mori, Naoko.....*Disclosed no conflict of interest.*

Mori, Yu.....*Disclosed no conflict of interest.*

Morioka, Kazuhito.....*Disclosed no conflict of interest.*

Morioka, Yasuhide.....3A: Shionogi Co Ltd.

Morita, Akira.....*Disclosed no conflict of interest.*

Morita, Erika.....*Disclosed no conflict of interest.*

Morita, Yugo.....6: Amedica Co.

Morita, Yugo.....6: Amedica Co.

Morley, Christopher P.....*Disclosed no conflict of interest.*

Moroder, Philipp.....1: NCS Lab, Arthrex Inc; 2: Arthrex; 3B: DePuy Synthes Mitek, Arthrex Inc, NCS Lab; 5: Arthrex Inc; 9: German Society for Shoulder and Elbow Surgery.

Morosawa, Kazuma.....*Disclosed no conflict of interest.*

Morozov, Katya.....*Disclosed no conflict of interest.*

Morpeth, Brice.....*Disclosed no conflict of interest.*

Morris, Brandon.....*Disclosed no conflict of interest.*

Morris, Carol.....*Disclosed no conflict of interest.*

Morris, Matthew.....*Disclosed no conflict of interest.*

Morris, Randal.....*Disclosed no conflict of interest.*

Morris, Randal P.....*Disclosed no conflict of interest.*

Morrish, Benjamin.....*Disclosed no conflict of interest.*

Morrison, Courtney.....*Disclosed no conflict of interest.*

Morrison, Craig.....*Disclosed no conflict of interest.*

Morrison, Jefferson C.....2: J&J; 3B: Exactech; 5: Zimmer Biomet, Conformis, J&J, Exactech.

Morse, Kyle W......*Disclosed no conflict of interest.*

Morton, Amy M.....*Disclosed no conflict of interest.*

Moscinski, Catherine.....*Disclosed no conflict of interest.*

Mosher, Christopher Z.....*Disclosed no conflict of interest.*

Mosher, Christopher Z......*Disclosed no conflict of interest.*

Mosley, Grace E*Disclosed no conflict of interest.*

Moss, Isaac L1: Spineart; 3B: Stryker, Biedermann Motech, ATEC; 4: Orthozon, Spinal Simplicity.

Mostafa, Evan*Disclosed no conflict of interest.*

Mostafa, Fatemi*Disclosed no conflict of interest.*

Mote, Kelly L3A: DePuy Synthes.

Motomura, Goro*Disclosed no conflict of interest.*

Mou, Yongchao*Disclosed no conflict of interest.*

Moulton, Julia*Disclosed no conflict of interest.*

Mourkioti, Foteini*Disclosed no conflict of interest.*

Moutzouros, Vasilios*Disclosed no conflict of interest.*

Mowry, Katie3A: Organogenesis.

Mowry, Katie C3A: Organogenesis.

Muehleman, Carol*Disclosed no conflict of interest.*

Mueller, John Kyle P3A: Zimmer Biomet; 4: Zimmer Biomet.

Mueller, John P3A: Zimmer Biomet; 4: Zimmer Biomet.

Mueller, Sebastian*Disclosed no conflict of interest.*

Mueske, Nicole M.*Disclosed no conflict of interest.*

Muh, Stephanie3B: DePuy, A Johnson & Johnson Company, Exactech, Inc, FX Shoulder; 5: Smith & Nephew; 9: AAOS, American Orthopaedic Association.

Muir, Brittney C*Disclosed no conflict of interest.*

Muire, Preeti J*Disclosed no conflict of interest.*

Muirhead-Allwood, Sarah K*Disclosed no conflict of interest.*

Mukherjee, Kaushik*Disclosed no conflict of interest.*

Mukherjee, Satanik*Disclosed no conflict of interest.*

Mukohara, Shintaro*Disclosed no conflict of interest.*

Mukundan, Roshni*Disclosed no conflict of interest.*

Mulcahey, Mary2: Arthrex, Inc.; 8: American Journal of Sports Medicine Electronic Media, Arthroscopy, Ortho Info; 9: AAOS, American Orthopaedic Society for Sports Medicine, Arthroscopy Association of North America, Ruth Jackson Orthopaedic Society, The Forum.

Mulcahey, Mary2: Arthrex, Inc: Paid presenter or speaker; 8: American Journal of Sports Medicine Electronic Media: Editorial or governing board, Arthroscopy: Editorial or governing board,

Ortho Info: Editorial or governing board; 9: AAOS: Board or committee member, American Orthopaedic Society for Sports Medicine: Board or committee member, Arthroscopy Association of North America: Board or committee member, Ruth Jackson Orthopaedic Society: Board or committee member, The Forum: Board or committee member.

Mulcahey, Mary K......2: Arthrex, Inc: Paid presenter or speaker; 8: American Journal of Sports Medicine Electronic Media: Editorial or governing board, Arthroscopy: Editorial or governing board, Ortho Info: Editorial or governing board; 9: AAOS: Board or committee member, American Orthopaedic Society for Sports Medicine: Board or committee member, Arthroscopy Association of North America: Board or committee member, Ruth Jackson Orthopaedic Society: Board or committee member, The Forum: Board or committee member.

Mulier, Michiel*Disclosed no conflict of interest.*

Muljadi, Patrick M*Disclosed no conflict of interest.*

Mulkern, Robert V.*Disclosed no conflict of interest.*

Mullen, Michael.....*Disclosed no conflict of interest.*

Mullen, Michael T*Disclosed no conflict of interest.*

Mullen, Scott3B: Stryker.

Mulligan, Edward.....*Disclosed no conflict of interest.*

Mulligan, Edward P.....*Disclosed no conflict of interest.*

Mumith, Aadil.....*Disclosed no conflict of interest.*

Muneta, Takeshi*Disclosed no conflict of interest.*

Munford, Maxwell James*Disclosed no conflict of interest.*

Munro, Jacob T*Disclosed no conflict of interest.*

Munsch, Maria Amelia.....*Disclosed no conflict of interest.*

Mura, Nariyuki.....*Disclosed no conflict of interest.*

Murakami, Hideki*Disclosed no conflict of interest.*

Murakami, Koji*Disclosed no conflict of interest.*

Murakawa, Yasuhiro*Disclosed no conflict of interest.*

Muralidharan, Krishna*Disclosed no conflict of interest.*

Murata, Daiki.....*Disclosed no conflict of interest.*

Murata, Kenji.....*Disclosed no conflict of interest.*

Murata, Yoichi*Disclosed no conflict of interest.*

Muratoglu, Orhun.....1: Corin, Stryker, Arthrex, Conformis, Meril Healthcare, Exactech, Cambridge Polymer Group; 4: Cambridge Polymer Group, Orthopedic Technology Group, Alchemist.

Muratoglu, Orhun1: Corin, Zimmer Biomet, Stryker, Kyocera, Arthrex, ConforMIS, Meril Healthcare, Exactech, Cambridge Polymer Group; 4: Cambridge Polymer Group, Orthopedic Technology Group, Alchemist.

Muratovic, Dzenita*Disclosed no conflict of interest.*

Muriuki, Muturi*Disclosed no conflict of interest.*

Murphy, Lance A.*Disclosed no conflict of interest.*

Murphy, Meredith*Disclosed no conflict of interest.*

Murray, David W.3B: Zimmer Biomet; 5: Zimmer Biomet; 7A: Zimmer Biomet.

Murray, Hallie3A: Tyber Medical.

Murray, Martha M.4: MIACH Orthopaedics; 7B: Springer Publishing.

Murray, Martha M.4: MMM is an equity holder in MIACH Orthopaedics.; 7B: MMM receives royalties from Springer Publishing.

Murthi, Anand1: Globus Inc, Depuy, Ignite Orthopaedics; 3B: Ignite Orthopaedics, Catalyst Orthoscience, Globus Inc, Depuy; 4: Catalyst Orthoscience, Ignite Orthopaedics, Aevumed; 7A: WRS Inc; 8: Journal of Shoulder and Elbow Surgery; 9: American Shoulder and Elbow Surgeons.

Murthi, Anand M1: AAOS: board or committee member; American Journal of Orthopedics: editorial or governing board, publishing royalties, financial or material support; American Shoulder and Elbow Surgeons: board or comm.

Murugesh, Deepa K*Disclosed no conflict of interest.*

Musahl, Volker7B: Smith & Nephew, Arthrex, Depuy Synthes, Conmed, Springer.

Muscat, Samantha Natsumi*Disclosed no conflict of interest.*

Musson, David S*Disclosed no conflict of interest.*

Mustafy, Tanvir*Disclosed no conflict of interest.*

Muthukrishnan, Gowrishankar*Disclosed no conflict of interest.*

Mutreja, Isha*Disclosed no conflict of interest.*

Mwale, Fackson*Disclosed no conflict of interest.*

Myers, Casey*Disclosed no conflict of interest.*

Myers, Casey A*Disclosed no conflict of interest.*

Myers, Erik*Disclosed no conflict of interest.*

Myers, Kristin M*Disclosed no conflict of interest.*

Nabeki, Shogo*Disclosed no conflict of interest.*

Nadeau, Elizabeth*Disclosed no conflict of interest.*

Nadesan, Puvindrana*Disclosed no conflict of interest.*

Nagai, Kanto*Disclosed no conflict of interest.*

Nagamine, Ryuji.....*Disclosed no conflict of interest.*

Nagamune, Kouki.....*Disclosed no conflict of interest.*

Naganuma, Yasushi.....*Disclosed no conflict of interest.*

Nagata, Sanae.....*Disclosed no conflict of interest.*

Nagata, Tadashi*Disclosed no conflict of interest.*

Nagel, Thomas*Disclosed no conflict of interest.*

Nagelli, Christopher*Disclosed no conflict of interest.*

Nagura, Takeo.....*Disclosed no conflict of interest.*

Naito, Yohei*Disclosed no conflict of interest.*

Nakagaki, Sumika*Disclosed no conflict of interest.*

Nakagawa, Koichi*Disclosed no conflict of interest.*

Nakagawa, Shinsuke*Disclosed no conflict of interest.*

Nakagawa, Shuji*Disclosed no conflict of interest.*

Nakagawa, Yusuke.....*Disclosed no conflict of interest.*

Nakahara, Ichiro*Disclosed no conflict of interest.*

Nakajima, Kosei*Disclosed no conflict of interest.*

Nakajima, Shun.....*Disclosed no conflict of interest.*

Nakamura, Hiroaki.....*Disclosed no conflict of interest.*

Nakamura, Kunio*Disclosed no conflict of interest.*

Nakamura, Mary.....*Disclosed no conflict of interest.*

Nakamura, Masaya*Disclosed no conflict of interest.*

Nakamura, Nariaki.....*Disclosed no conflict of interest.*

Nakamura, Takayuki3A: Employee of Johnson and Johnson (DePuy); 4: Stockholder of Johnson and Johnson.

Nakamura, Tomomasa.....*Disclosed no conflict of interest.*

Nakanishi, Kazuyoshi*Disclosed no conflict of interest.*

Nakanishi, Yuta.....*Disclosed no conflict of interest.*

Nakano, Naoki*Disclosed no conflict of interest.*

Nakasa, Tomoyuki*Disclosed no conflict of interest.*

Nakashima, Daisuke.....*Disclosed no conflict of interest.*

Nakashima, Iris*Disclosed no conflict of interest.*

Nakashima, Yasuharu*Disclosed no conflict of interest.*

Nakasone, Aaron*Disclosed no conflict of interest.*

Nakata, Ken*Disclosed no conflict of interest.*

Nakayama, Koichi*Disclosed no conflict of interest.*

Nakazawa, Takahiro.....3A: AnGes Inc.

Nakonezny, Paul*Disclosed no conflict of interest.*

Nakonezny, Paul A.....*Disclosed no conflict of interest.*

Nalbach, Mathis.....*Disclosed no conflict of interest.*

Nam, Denis*Disclosed no conflict of interest.*

Nam, Gun Woo*Disclosed no conflict of interest.*

Nam, Jin Woo.....*Disclosed no conflict of interest.*

Nambiar, Pallavi.....*Disclosed no conflict of interest.*

Nambu, Satya3A: MicroPort Orthopedics.

Namdari, Surena*Disclosed no conflict of interest.*

Nammour, Michael*Disclosed no conflict of interest.*

Naofal, Aamer.....*Disclosed no conflict of interest.*

Naot, Dorit.....*Disclosed no conflict of interest.*

Napier, T. Celeste.....3B: GIA-Miami LLC, Rochon Genova, LLP; 5: Acadia Pharmaceuticals, Inc.

Narayan, Ramani*Disclosed no conflict of interest.*

Narayanan, Suresh.....*Disclosed no conflict of interest.*

Nasamran, Chanond A*Disclosed no conflict of interest.*

Nasert, Michael3A: mtf biologics; 6: ConMed.

Nasser, Philip*Disclosed no conflict of interest.*

Naudie, Douglas.....1: Smith & Nephew; 2: Smith & Nephew; 3B: Smith & Nephew; 6: Smith & Nephew, DePuy, Stryker; 9: Knee Society.

Nauman, Eric A*Disclosed no conflict of interest.*

Nauth, Aaron2: Stryker, Synthes; 3B: Toronto Blue Jays; 5: Stryker, Synthes, Zimmer, Wright Medical, Smith & Nephew; 9: Chair of Basic Science Committee, OTA.

Nazal, Mark R......*Disclosed no conflict of interest.*

Nazarian, Ara*Disclosed no conflict of interest.*

Nazemi, Alireza*Disclosed no conflict of interest.*

Nazemi, Alireza K.*Disclosed no conflict of interest.*

Nazemi, Alireza Kaveh*Disclosed no conflict of interest.*

Neal, Craig J*Disclosed no conflict of interest.*

Neal, Kelsey*Disclosed no conflict of interest.*

Neal, Matthew.....*Disclosed no conflict of interest.*

Nedopil, Alexander Johannes ...3B: Medacta.

NedreLOW, David*Disclosed no conflict of interest.*

Negishi, Keisuke.....*Disclosed no conflict of interest.*

Negri, Stefano*Disclosed no conflict of interest.*

Neidlinger-Wilke, Cornelia*Disclosed no conflict of interest.*

Nellans, Kate W*Disclosed no conflict of interest.*

Nelson, Anna-Laura*Disclosed no conflict of interest.*

Nelson, Brad B*Disclosed no conflict of interest.*

Nelson, Bradley J*Disclosed no conflict of interest.*

Nelson, Fred.....7B: Elsevier royalties.

Nelson, Stephen P.....*Disclosed no conflict of interest.*

Nemke, Brett*Disclosed no conflict of interest.*

Neo, Masashi*Disclosed no conflict of interest.*

Nepple, Jeffrey.....2: Smith & Nephew; 3B: Responsive Arthroscopy, Smith & Nephew; 5: Smith & Nephew, Zimmer; 8: Arthroscopy; 9: Pediatric Research in Sports Medicine Society.

Neral, Mithun*Disclosed no conflict of interest.*

Neri, John.....*Disclosed no conflict of interest.*

Neto, Mozart Queiroz*Disclosed no conflict of interest.*

Neu, Corey P*Disclosed no conflict of interest.*

Neu, Corey P.*Disclosed no conflict of interest.*

Neuhoefer, Patrick.....*Disclosed no conflict of interest.*

Neuwirth, Alexander*Disclosed no conflict of interest.*

Nevelos, Jim.....3A: Stryker employee; 4: Stryker Corp.

Nevitt, Michael C*Disclosed no conflict of interest.*

Newcomb, Nicholas*Disclosed no conflict of interest.*

Newcomb, Nicholas L.....*Disclosed no conflict of interest.*

Newhouse, Alexander.....*Disclosed no conflict of interest.*

Newhouse, Alexander C.....*Disclosed no conflict of interest.*

Newman, Harrah*Disclosed no conflict of interest.*

Newman, Simon3B: Orthonika.

Ng, Geoffrey*Disclosed no conflict of interest.*

Ng, Martin*Disclosed no conflict of interest.*

Ng, Mitchell*Disclosed no conflict of interest.*

Ngo, Lucy*Disclosed no conflict of interest.*

Nguyen, Julie*Disclosed no conflict of interest.*

Nguyen, Lich Thi.....*Disclosed no conflict of interest.*

Nguyen, Matthew H.....*Disclosed no conflict of interest.*

Nguyen, Nhi.....*Disclosed no conflict of interest.*

Nguyen, Phong K.....*Disclosed no conflict of interest.*

Nho, Shane J3B: Stryker.

Nho, Shane J5: Ilosource, Arthrex, DJ Orthopaedics, Athletico, Miomed, Smith & Nephew, Stryker.

Nho, Shane J5: Stryker, Springer, Össur, Arthrex, Linvatec, Smith & Nephew, DJ Orthopaedics, Miomed, Athletico, and Allosource.

Nho, Shane J5: Allosource, Arthrex, DJ Orthopaedics, Athletico, Miomed, Smith & Nephew, Stryker.

Nho, Shane J1: Ossur, Stryker; 3B: Stryker; 5: Allosource, Arthrex, Inc, Athletico, DJ Orthopaedics, Linvatec, Miomed, Smith & Nephew, Stryker; 6: Springer; 7B: Springer; 9: American Orthopaedic Association, American Orthopaedic Society for Sports Medicine, , Arthroscopy Association of North America.

Nho, Shane J5: Allosource, Arthrex, Athletico, DJ Orthopaedics, Linvatec, Miomed, Smith & Nephew, Stryker; 7B: Springer; 9: Allosource, American Orthopaedic Society for Sports Medicine, Arthroscopy Association of North America.

Nho, Shane J1: Stryker; 3B: Stryker; 5: Allosource, Arthrex, Athletico, DJ Orthopaedics, Linvatec, Miomed, Stryker, Smith & Nephew; 7B: Springer; 9: American Orthopaedic Association, American Orthopaedic Society for Sports Medicine, Arthroscopy Association of North America.

Ni, Ai*Disclosed no conflict of interest.*

Nichenko, Anna*Disclosed no conflict of interest.*

Nichols, Anne E.C.*Disclosed no conflict of interest.*

Nichols, Jennifer*Disclosed no conflict of interest.*

Nichols, Jennifer A*Disclosed no conflict of interest.*

Nichols, Luke.....*Disclosed no conflict of interest.*

Nicholson, Gregory P1: Innomed, Wright Medical Technology; 2: ArthroSurface; 3B: Tornier, ArthroSurface; 9: ASES.

Nicolaides, Marios*Disclosed no conflict of interest.*

Nicolozakes, Constantine.....*Disclosed no conflict of interest.*

Niedermair, Tanja*Disclosed no conflict of interest.*

Niederost, Barbara.....*Disclosed no conflict of interest.*

Nielsen, Gunnlaugur P*Disclosed no conflict of interest.*

Nielsen, Jeffery J3A: Novosteo Inc.

Nielson, Clark R......*Disclosed no conflict of interest.*

Nieminen, Petteri*Disclosed no conflict of interest.*

Niesen, Abigail.....*Disclosed no conflict of interest.*

Nigam, Aman*Disclosed no conflict of interest.*

Niikura, Takahiro*Disclosed no conflict of interest.*

Niki, Yasuo*Disclosed no conflict of interest.*

Nikolaou, Sia.....*Disclosed no conflict of interest.*

Nims, Robert J.....*Disclosed no conflict of interest.*

Nimura, Akimoto*Disclosed no conflict of interest.*

Ning, Bohao*Disclosed no conflict of interest.*

Ninomiya, James T*Disclosed no conflict of interest.*

Ninomiya, Mark J......*Disclosed no conflict of interest.*

Nishida, Kazuya.....*Disclosed no conflict of interest.*

Nishida, Kotaro*Disclosed no conflict of interest.*

Nishida, Kyohei.....*Disclosed no conflict of interest.*

Nishida, Yasuhiro*Disclosed no conflict of interest.*

Nishida, Yohei.....*Disclosed no conflict of interest.*

Nishida, Yoshihiro.....*Disclosed no conflict of interest.*

Nishimoto, Hanako.....*Disclosed no conflict of interest.*

Nishimura, Akinobu.....*Disclosed no conflict of interest.*

Nishine, Jun.....*Disclosed no conflict of interest.*

Nishio, Megumi.....*Disclosed no conflict of interest.*

Nishizawa, Kohei.....*Disclosed no conflict of interest.*

Nishtala, Sita Nirupama.....*Disclosed no conflict of interest.*

Niu, Xiao.....*Disclosed no conflict of interest.*

Noble, Philip.....1: Stryker, Zimmer Biomet; 3B: Zimmer Biomet; 4: Joint View, LLC; 5: CeramTech; 6: Zimmer Biomet; 7B: Springer; 8: J of Arthroplasty, J of Hip Preservation Surgery; 9: International Soc of Technology in Arthroplasty.

Noble, Philip C.....1: Zimmer Biomet, Stryker; 3B: Zimmer Biomet; 4: Joint View; 5: CeramTech, Zimmer Biomet, Arthrex, Smith & Nephew; 6: DJO; 7B: Springer; 8: Journal of Hip Preservation; 9: International Society of Technology in Arthroplasty.

Noble, Philip C.....1: Stryker; Zimmer Biomet; 4: Joint View; 5: Stryker, Zimmer Biomet, Smith & Nephew, Arthrex, CeramTech; 6: DJO; 7B: Springer; 8: Journal of Preservation; 9: International Society of Technology in Arthroplasty.

Noble, Philip C.....1: Zimmer Biomet, Stryker; 3B: Zimmer Biomet; 4: Joint View; 5: Stryker, Zimmer Biomet, Smith & Nephew, Arthrex, CeramTech; 6: DJO; 7B: Springer; 8: Journal of Hip Preservation; 9: International Society of Technology in Arthroplasty.

Nobunori, Takahashi.....*Disclosed no conflict of interest.*

Nodzo, Scott R.....*Disclosed no conflict of interest.*

Noel, Peter.....*Disclosed no conflict of interest.*

Noiseux, Nicolas O.....3B: Microport, Smith & Nephew.

Nolte, Philip-C.....*Disclosed no conflict of interest.*

Nolte, Philip-Christian.....5: Research grants from Arthrex Inc.; 6: Fellowship sponsored by Arthrex Inc.

Noonan, Alex Matthew.....*Disclosed no conflict of interest.*

Norman, Elizabeth.....*Disclosed no conflict of interest.*

Norman, Elizabeth H.....*Disclosed no conflict of interest.*

Norman, Timothy L.....*Disclosed no conflict of interest.*

Norton, Andrew.....*Disclosed no conflict of interest.*

Notermans, Thomas Maria Willem *Disclosed no conflict of interest.*

Novais, Eduardo.....*Disclosed no conflict of interest.*

Novais, Eduardo N*Disclosed no conflict of interest.*

Novak, Natalie*Disclosed no conflict of interest.*

Nowak, Emma K.....*Disclosed no conflict of interest.*

Nowak, Lauren.....*Disclosed no conflict of interest.*

Nowlan, Niamh C*Disclosed no conflict of interest.*

Nuckley, David J.....3A: Stryker Spine.

Nukuto, Koji.....*Disclosed no conflict of interest.*

Numaguchi, Kyosuke*Disclosed no conflict of interest.*

Nunley, Brandon S*Disclosed no conflict of interest.*

Nuss, Courtney A*Disclosed no conflict of interest.*

Nwachuku, Chinenye O.....*Disclosed no conflict of interest.*

Nyayapati, Priya.....*Disclosed no conflict of interest.*

Oba, Hiroki.....*Disclosed no conflict of interest.*

Oba, Masatoshi.....*Disclosed no conflict of interest.*

Obeidat, Alia M.....*Disclosed no conflict of interest.*

Oberley-Deegan, Rebecca.....3C: BioMimetix.

Obioha, Obianuju.....*Disclosed no conflict of interest.*

O'Brien, Fergal J1: Integra LifeSciences; 2: Integra LifeSciences; 3A: SurgaColl Technologies; 3C: SurgaColl Technologies; 5: SurgaColl Technologies, Integra LifeSciences, Johnson & Johnson; 6: SurgaColl Technologies, Integra LifeSciences, Johnson & Johnson, Jellagen; 7A: Elsevier.

O'Brien, Luke*Disclosed no conflict of interest.*

Öbrink-Hansen, Kristina.....*Disclosed no conflict of interest.*

Ocampo Moré, Ari Digiácomo...*Disclosed no conflict of interest.*

Ochiai, Satoshi*Disclosed no conflict of interest.*

Ockerhausen, Hayley G*Disclosed no conflict of interest.*

Ocksrider, Justin*Disclosed no conflict of interest.*

O'Connell, Grace*Disclosed no conflict of interest.*

O'Connor, Daniel*Disclosed no conflict of interest.*

O'Connor, J. Patrick.....*Disclosed no conflict of interest.*

Oda, Eimi*Disclosed no conflict of interest.*

Oda, Takahiro*Disclosed no conflict of interest.*

O'Donnell, Benjamen*Disclosed no conflict of interest.*

O'Donnell, Evan A*Disclosed no conflict of interest.*

O'Donnell, Ryan*Disclosed no conflict of interest.*

O'Donoghue, Cristina M*Disclosed no conflict of interest.*

O'Driscoll, Caitriona M*Disclosed no conflict of interest.*

Odum, Susan*Disclosed no conflict of interest.*

Odum, Susan M*3B: American Joint Replacement Registry; 9: Lumbar Spine Research Society, North American Spine Society.*

Oe, Keisuke*Disclosed no conflict of interest.*

Oest, Megan*Disclosed no conflict of interest.*

Oest, Megan E*Disclosed no conflict of interest.*

Oest, Megan E*Disclosed no conflict of interest.*

Oestreich, Arin K.*Disclosed no conflict of interest.*

Oganesyan, Ruben*Disclosed no conflict of interest.*

Ogihara, Naomichi*Disclosed no conflict of interest.*

Ogle, Molly E*Disclosed no conflict of interest.*

Ogon, Izaya*Disclosed no conflict of interest.*

Oguchi, Akiko*Disclosed no conflict of interest.*

Oh, Irvin*1: Innomed.*

Oh, Joo Han*Disclosed no conflict of interest.*

Oh, Joo-Han*Disclosed no conflict of interest.*

Oh, Seoghyun*Disclosed no conflict of interest.*

O'Hara, Kelsey*Disclosed no conflict of interest.*

O'Hara, Kelsey M*Disclosed no conflict of interest.*

Ohashi, Yoshifumi*Disclosed no conflict of interest.*

Ohkoshi, Yasumitsu*Disclosed no conflict of interest.*

Ohnishi, Hiroki*Disclosed no conflict of interest.*

Ohno, Kinji*Disclosed no conflict of interest.*

Ohta, Daichi*Disclosed no conflict of interest.*

Ohtori, Seiji*Disclosed no conflict of interest.*

Oichi, Takeshi*Disclosed no conflict of interest.*

Oishi, Ryuta*Disclosed no conflict of interest.*

Oishi, Takayuki*Disclosed no conflict of interest.*

Ojanen, Simo P*Disclosed no conflict of interest.*

Oka, Yuichiro*Disclosed no conflict of interest.*

Okada, Mitsuhiro*Disclosed no conflict of interest.*

Okada, Yohei*Disclosed no conflict of interest.*

Okamoto, Yoshihiro*Disclosed no conflict of interest.*

Okamoto, Yoshinori*Disclosed no conflict of interest.*

Okano, Ichiro*Disclosed no conflict of interest.*

Okanouchi, Noriya*Disclosed no conflict of interest.*

Okawa, Atsushi*Disclosed no conflict of interest.*

Okawa, Atushi*Disclosed no conflict of interest.*

Okawara, Hiroki*Disclosed no conflict of interest.*

Okayoshi, Tomohiro*Disclosed no conflict of interest.*

Okazaki, Ken*Disclosed no conflict of interest.*

O'Keefe, Regis*Disclosed no conflict of interest.*

O'Keefe, Regis J7A: Fate Therapeutics; 8: Bone; 9: AOA.

Okewunmi, Jeffrey*Disclosed no conflict of interest.*

Oki, Hiroharu*Disclosed no conflict of interest.*

Okubo, Atsushi*Disclosed no conflict of interest.*

Okubo, Taketo*Disclosed no conflict of interest.*

Oladeji, Lasun O*Disclosed no conflict of interest.*

Oláh, Tamás*Disclosed no conflict of interest.*

Olendorf, Narcisa3A: Orthopedic Analysis.

Oliver, David*Disclosed no conflict of interest.*

Olson, Brooke*Disclosed no conflict of interest.*

Olson, Lucas C*Disclosed no conflict of interest.*

Olson, Steven.....5: Depuy Synthes.

Olszewski, Adam.....*Disclosed no conflict of interest.*

Oluyede, Dami O.....*Disclosed no conflict of interest.*

O'Malley, Michael.....*Disclosed no conflict of interest.*

Omari, Ali.....*Disclosed no conflict of interest.*

Ominsky, Michael S.3A: Radius Health Inc; 4: Radius Health Inc.

Omoto, Takenori.....*Disclosed no conflict of interest.*

O'Neill, Conor W.4: Nocimed and Relievant.

Onishi, Kentaro*Disclosed no conflict of interest.*

Onishi, Soichi*Disclosed no conflict of interest.*

Önnerfjord, Patrik.....*Disclosed no conflict of interest.*

Onodera, Tomohiro5: Shionogi Co Ltd.

Onotera, Tomohiro*Disclosed no conflict of interest.*

Onuma, Hiroaki.....*Disclosed no conflict of interest.*

Onyekwere, Ikenna.....*Disclosed no conflict of interest.*

Onyeukwu, Chukwudi.....*Disclosed no conflict of interest.*

Opperman, Angelica*Disclosed no conflict of interest.*

Oral, Ebru.....1: Corin, Stryker, Iconacy, Renovis, ConforMIS, Meril Healthcare, Exactech.

Oral, Ebru.....1: Corin, Stryker, Iconacy, Renovis, Arthrex, Conformis, Meril Healthcare, Exactech.

Orava, Heta.....*Disclosed no conflict of interest.*

Oravec, Daniel*Disclosed no conflict of interest.*

Orbay, Jorge.....*Disclosed no conflict of interest.*

Ordonez Diaz, Tamara.....*Disclosed no conflict of interest.*

Ordway, Nathaniel R.....5: AgNovos Healthcare.

Orías, Alejandro A Espinoza*Disclosed no conflict of interest.*

Orita, Kumi*Disclosed no conflict of interest.*

Orland, Keith J.*Disclosed no conflict of interest.*

Orozco, Fabio3B: Stryker.

Orozco, Gustavo*Disclosed no conflict of interest.*

Orton, Kevin.....*Disclosed no conflict of interest.*

Osborn, Michelle L.....*Disclosed no conflict of interest.*

Osei, David.....*Disclosed no conflict of interest.*

Oshima, Yasushi.....*Disclosed no conflict of interest.*

Osterhage, Wyatt W......*Disclosed no conflict of interest.*

Osterhed, Elin.....*Disclosed no conflict of interest.*

Oswald, Sara J.....*Disclosed no conflict of interest.*

Ota, Masahiro.....*Disclosed no conflict of interest.*

Ota, Mitsutoshi.....*Disclosed no conflict of interest.*

Otani, Shunya.....*Disclosed no conflict of interest.*

Otani, Toshiro.....*Disclosed no conflict of interest.*

Otero, Jesse E.....*3B: DePuy.*

Otero, Miguel.....*3B: Regeneron Pharmaceuticals; 5: Tissue Genesis Inc.*

Otsuki, Shuhei.....*Disclosed no conflict of interest.*

Ott, Jeff.....*3A: Biorez.*

Ott, Kelly.....*Disclosed no conflict of interest.*

Ouellet, Jean.....*Disclosed no conflict of interest.*

Outerleys, Jereme B.....*Disclosed no conflict of interest.*

Overman, Steven.....*3B: KenSci, Inc.*

Owen, John R.....*Disclosed no conflict of interest.*

Owen, Mark.....*Disclosed no conflict of interest.*

Owens, Brett.....*Disclosed no conflict of interest.*

Owens, Brett D.....*3B: Mitek, Conmed, Vericel, Miach; 4: Vivorte; 5: Arthrex, Mitek, MTF; 7A: Conmed.*

Owens, Brett D......*3B: consultant of MTF/Conmed, Mitek, Vericel, MIACH; 4: holds stock options in Vivorte; 7A: receives royalties from Conmed; 8: American Journal of Sports Medicine; 9: Orthopedics, Orthopedics Today, AOSSM.*

Owens, Johnny.....*3B: 3B.*

Owhonda, Rebisi.....*Disclosed no conflict of interest.*

Oyama, Kazuki.....*Disclosed no conflict of interest.*

Oyama, Ryunosuke.....*Disclosed no conflict of interest.*

Oyama, Shohei.....*Disclosed no conflict of interest.*

Ozaki, Toshifumi*Disclosed no conflict of interest.*

Ozeki, Nobutake*Disclosed no conflict of interest.*

Ozevin, Didem*Disclosed no conflict of interest.*

Ozone, Kaichi*Disclosed no conflict of interest.*

Pekala, Jakub R......*Disclosed no conflict of interest.*

Pekala, Przemyslaw A*Disclosed no conflict of interest.*

Pacheco, Marguerite Aurora.....*Disclosed no conflict of interest.*

Pacheco, Yan C......*Disclosed no conflict of interest.*

Pacheco, Yan Carlos*Disclosed no conflict of interest.*

Pacicca, Donna.....9: ORS Chair of Public Outreach.

Packer, Samuel*Disclosed no conflict of interest.*

Padgaonkar, Adit*Disclosed no conflict of interest.*

Padilla, Alicia3A: Orthopedic Analysis.

Paez, Conner C.....*Disclosed no conflict of interest.*

Pafitanis, Georgios.....*Disclosed no conflict of interest.*

Pagani, Chase.....*Disclosed no conflict of interest.*

Paglia, David*Disclosed no conflict of interest.*

Paglia, David N......*Disclosed no conflict of interest.*

Pal, Deepanwita.....*Disclosed no conflict of interest.*

Palacios, Pablo*Disclosed no conflict of interest.*

Palmer, Ian3A: Globus Medical Sales Representative.

Palmer, Matthew.....3A: Stryker.

Palmieri-Smith, Riann M7B: AOSSM Medical Publishing Board; 8: Sports Health: A Multidisciplinary Approach, Journal of Applied Biomechanics, Journal of Athletic Training.

Pan, Chi-chun.....*Disclosed no conflict of interest.*

Pan, Dongfeng*Disclosed no conflict of interest.*

Pan, Haiying*Disclosed no conflict of interest.*

Panchapakesan, Karuna.....*Disclosed no conflict of interest.*

Pandya, Shivani.....*Disclosed no conflict of interest.*

Panebianco, Christopher J*Disclosed no conflict of interest.*

Pang, Henry*Disclosed no conflict of interest.*

Pannell, William C*Disclosed no conflict of interest.*

Pannellini, Tania*Disclosed no conflict of interest.*

Panos, Joseph A*Disclosed no conflict of interest.*

Paoli, Allison*Disclosed no conflict of interest.*

Papadopoulos, Dimitrios*Disclosed no conflict of interest.*

Papannagari, Ramprasad3A: Smith + Nephew; 4: Smith + Nephew.

Pape, Dietrich*Disclosed no conflict of interest.*

Pape, Hans-Christoph*Disclosed no conflict of interest.*

Para, Ashok*Disclosed no conflict of interest.*

Parada, Stephen A.3B: Arthrex, Inc, Exactech, Inc; 5: Exactech, Inc; 9: Committee member for AAOS, Committee member for ASES.

Paradiso, Francesca*Disclosed no conflict of interest.*

Parajuli, Ashutosh*Disclosed no conflict of interest.*

Parajuli, Dikshya*Disclosed no conflict of interest.*

Parduhn, Charlie3A: Zimmer Biomet; 4: Zimmer Biomet.

Parduhn, Charlie3A: Zimmer Biomet.

Pare, Daniel W.*Disclosed no conflict of interest.*

Pareek, Ayoosh*Disclosed no conflict of interest.*

Parekh, Jesal N*Disclosed no conflict of interest.*

Parekh, Selene G.*Disclosed no conflict of interest.*

Parente, James*Disclosed no conflict of interest.*

Paris, Sebastian*Disclosed no conflict of interest.*

Parisi, Daniele*Disclosed no conflict of interest.*

Park, Dongsu*Disclosed no conflict of interest.*

Park, Gayoung*Disclosed no conflict of interest.*

Park, Hyeon3A: Theradaptive, Inc.

Park, Hyung Bin*Disclosed no conflict of interest.*

Park, Jeannie*Disclosed no conflict of interest.*

Park, Joo Hyun*Disclosed no conflict of interest.*

Park, Joshua YK.....*Disclosed no conflict of interest.*

Park, Kwang Hwan.....*Disclosed no conflict of interest.*

Park, Na Rae*Disclosed no conflict of interest.*

Park, Sang-Hyun.....5: DePuy Orthopaedics, Orthofix, Microport, Nuvasive, NIH.

Park, Seok-hee.....*Disclosed no conflict of interest.*

Park, Suk-Hee*Disclosed no conflict of interest.*

Park, Won*Disclosed no conflict of interest.*

Park, Young-Eun.....*Disclosed no conflict of interest.*

Parker, Dana M.....*Disclosed no conflict of interest.*

Parker, Emily.....*Disclosed no conflict of interest.*

Parks, Brent1: Arthrex, Inc: IP royalties; DARCO: IP royalties; DJ Orthopaedics: IP royalties; Foot and Ankle International: Editorial or governing board; Zimmer: IP royalties.

Parks, Russell*Disclosed no conflict of interest.*

Parola, Lauren R......*Disclosed no conflict of interest.*

Parratte, Sebastian1: Zimmer Biomet, NewClip Technic; 2: Zimmer Biomet; 3B: Zimmer Biomet; 5: Zimmer Biomet; 9: European Knee Society.

Parson, Jacob*Disclosed no conflict of interest.*

Partain, Brittany D*Disclosed no conflict of interest.*

Parthasarathy, Gautam.....*Disclosed no conflict of interest.*

Partridge, Simon*Disclosed no conflict of interest.*

Parvaresh, Kevin*Disclosed no conflict of interest.*

Parvaresh, Kevin C*Disclosed no conflict of interest.*

Parvizi, Javad*Disclosed no conflict of interest.*

Pascual-Garrido, Cecilia5: Sanofi, OREF, Zimmer.

Pascual-Garrido, Cecilia5: AOSSM/Sanofi, OREF, Zimmer.

Pasculle, William.....*Disclosed no conflict of interest.*

Pasieka, Pawel Melchior*Disclosed no conflict of interest.*

Pastinen, Tomi*Disclosed no conflict of interest.*

Patel, Anand*Disclosed no conflict of interest.*

Patel, Jay M3B: NovoPedics.

Patel, Jay M.*Disclosed no conflict of interest.*

Patel, Karan*Disclosed no conflict of interest.*

Patel, Neel*Disclosed no conflict of interest.*

Patel, Roosheel*Disclosed no conflict of interest.*

Patel, Urvi J.*Disclosed no conflict of interest.*

Patel, Vaidehi.....*Disclosed no conflict of interest.*

Patel, Vikas*Disclosed no conflict of interest.*

Patmon, Darin L.*Disclosed no conflict of interest.*

Patterson, Matthew.....*Disclosed no conflict of interest.*

Patton, Daniella M.*Disclosed no conflict of interest.*

Patwardhan, Avinash.....*Disclosed no conflict of interest.*

Paul, Ranjan Rashmi*Disclosed no conflict of interest.*

Paulus, Megan*Disclosed no conflict of interest.*

Pavan, Mauro3A: Fidia Farmaceutici.

Pavlesen, Sonja.....*Disclosed no conflict of interest.*

Pawar, Vivek.....3A: Smith & Nephew; 4: Smith & Nephew.

Payne, Christopher*Disclosed no conflict of interest.*

Payne, Emma*Disclosed no conflict of interest.*

Payne, Karin.....*Disclosed no conflict of interest.*

Paziewski, Mateusz P......*Disclosed no conflict of interest.*

Pearl, Matthew.....*Disclosed no conflict of interest.*

Pearle, Andrew3B: Exactech Inc, Smith & Nephew, Stryker, Zimmer; 4: Engage; 5: Stryker.

Peddada, MD, Kranti.....*Disclosed no conflict of interest.*

Peddinti, Pranav*Disclosed no conflict of interest.*

Pederson, Alisha P*Disclosed no conflict of interest.*

Pedoia, Valentina.....5: GE Healthcare.

Peebles, Liam A......*Disclosed no conflict of interest.*

Peelor III, Frederick F*Disclosed no conflict of interest.*

Pei, Shaopeng*Disclosed no conflict of interest.*

Peipert, Leah J......*Disclosed no conflict of interest.*

Pellegrini, Jr., Vincent D.*Disclosed no conflict of interest.*

Pelletier, Matthew.....*Disclosed no conflict of interest.*

Peloquin, John*Disclosed no conflict of interest.*

Penaranda, David*Disclosed no conflict of interest.*

Penatzer, Julia.....*Disclosed no conflict of interest.*

Peng, Yun.....3A: NuVasive.

Pennock, Andrew T1: Imagen; 3B: OrthoPediatrics; 9: American Orthopaedic Society for Sports Medicine, Pediatric Orthopaedic Society of North America.

Pensworth, Joel*Disclosed no conflict of interest.*

Peredo, Ana P*Disclosed no conflict of interest.*

Pérez-Bellmunt, Albert*Disclosed no conflict of interest.*

Perier-Metz, Camille*Disclosed no conflict of interest.*

Pernseiner, Ashley N.....*Disclosed no conflict of interest.*

Pernsteiner, Ashley N*Disclosed no conflict of interest.*

Peroglio, Marianna*Disclosed no conflict of interest.*

Perreault, Eric J*Disclosed no conflict of interest.*

Persons, Amanda L.5: Acadia Pharmaceuticals, Inc.

Persson, Andreas*Disclosed no conflict of interest.*

Pervaiz, Sahir S......*Disclosed no conflict of interest.*

Peterson, Andrew*Disclosed no conflict of interest.*

Peterson, Andrew C*Disclosed no conflict of interest.*

Peterson, Anna K*Disclosed no conflict of interest.*

Peterson, Joshua.....3A: Stryker.

Peterson, Sara.....*Disclosed no conflict of interest.*

Peterson, William*Disclosed no conflict of interest.*

Pezzanite, Lynn*Disclosed no conflict of interest.*

Pfannkuche, Judith J*Disclosed no conflict of interest.*

Pfeifer, Charlotte*Disclosed no conflict of interest.*

Pfeifer, Roman*Disclosed no conflict of interest.*

Pfeiffenberger, Moritz*Disclosed no conflict of interest.*

Pferdehirt, Lara*Disclosed no conflict of interest.*

Pham, Christine T.N.*Disclosed no conflict of interest.*

Pham, Christine TN*Disclosed no conflict of interest.*

Pham, Nguyen*Disclosed no conflict of interest.*

Phan, Amy*Disclosed no conflict of interest.*

Phan, Eileen*Disclosed no conflict of interest.*

Philippon, Marc J*Disclosed no conflict of interest.*

Philippon, Marc J.1: Arthrex, ArthroSurface, Bledsoe, CONMED Linvatec, DonJoy, Smith & Nephew; 3B: Smith & Nephew, MIS; 4: ArthroSurface, MIS, MJP Innovations, LLC, Vail Valley Surgery Center, EffRx, Proofpoint Biologics, TSC DME and TSC Imaging; 5: , Smith and Nephew, Ossur, Arthrex, Siemens, Vail Valley Medical Center; 6: , Smith & Nephew; 7B: , SLACK Incorporated, Elsevier; 9: , ASIAM, International Society for Hip Arthroscopy, AOSSM, Steadman Philippon Research Institute, Vail Health Services, Vail Valley Surgery Center Governing Council.

Phillips, Jennifer.....*Disclosed no conflict of interest.*

Phillips, Matthew.....2: Stryker Orthopaedics.

Phillips, Matthew.....3B: Stryker Orthopaedics, Smith & Nephew; 4: Ampio Pharmaceuticals, Turbett Surgical.

Phillips, Matthew.....2: Stryker.

Phillips, Nikki*Disclosed no conflict of interest.*

Phillips, Tammy E......*Disclosed no conflict of interest.*

Phu, Tuan.....*Disclosed no conflict of interest.*

Piche, Nicolas.....*Disclosed no conflict of interest.*

Piedra, Victor*Disclosed no conflict of interest.*

Piedrahita, Jorge A.....*Disclosed no conflict of interest.*

Pierce, Kirk.....*Disclosed no conflict of interest.*

Pierre, Kinsley*Disclosed no conflict of interest.*

Pinpin, Camille*Disclosed no conflict of interest.*

Pinto, Christopher.....*Disclosed no conflict of interest.*

Pinto, Otavio T......*Disclosed no conflict of interest.*

Pirkle, Sean*Disclosed no conflict of interest.*

Pirkle, Sean C*Disclosed no conflict of interest.*

Pirosa, Alessandro*Disclosed no conflict of interest.*

Pitcairn, Samuel.....*Disclosed no conflict of interest.*

Pitcairn, Samuel W.....*Disclosed no conflict of interest.*

Pitsillides, Andrew*Disclosed no conflict of interest.*

Piuzzi, Nicolas*Disclosed no conflict of interest.*

Piuzzi, Nicolas S.....5: Regenlab, Zimmer; 8: Journal of Hip Surgery, Journal of Knee Surgery;
9: ISCT, Orthopaedic Research Society.

Piva, Sara R*Disclosed no conflict of interest.*

Plakotaris, Elena*Disclosed no conflict of interest.*

Plakseychuk, Anton*Disclosed no conflict of interest.*

Plakseychuk, Anton Y.....*Disclosed no conflict of interest.*

Plantz, Mark.....*Disclosed no conflict of interest.*

Plate, F. Johannes*Disclosed no conflict of interest.*

Plate, Johannes F*Disclosed no conflict of interest.*

Plate, Johannes F.*Disclosed no conflict of interest.*

Pleshko, Nancy*Disclosed no conflict of interest.*

Ploeg, Heidi.....*Disclosed no conflict of interest.*

Ploeg, Heidi-Lynn6: Nobel Biocare Services AG.

Podsiadlo, Daniel*Disclosed no conflict of interest.*

Poik, Mathias.....*Disclosed no conflict of interest.*

Polakovic, Sandrine V3A: Blue Ortho.

Polamalu, Sene K*Disclosed no conflict of interest.*

Pollitt, Eleanor N.....*Disclosed no conflict of interest.*

Pollock, David C.1: DePuy; 2: DePuy; 3B: DePuy.

Pollock, J.....*Disclosed no conflict of interest.*

Polly, David W.....1: Royalties paid to institution: Globus and Medtronic; 3B: SI Bone,
Globus; 7B: Springer.

Pollyky, Paul*Disclosed no conflict of interest.*

Pond, Kristina M*Disclosed no conflict of interest.*

Pons, Françoise.....*Disclosed no conflict of interest.*

Popchak, Adam.....*Disclosed no conflict of interest.*

Popchak, Adam J.....*Disclosed no conflict of interest.*

Popovich, Jr., John M......*Disclosed no conflict of interest.*

Poppe, Tanner*Disclosed no conflict of interest.*

Porporati, Alessandro A.....3A: CeramTec, GmbH.

Porter, Annie*Disclosed no conflict of interest.*

Porter, Susan4: PolyNovo, Inc.

Portilla, Gabriela.....*Disclosed no conflict of interest.*

Portney, Daniel A.....*Disclosed no conflict of interest.*

Posey, Samuel L*Disclosed no conflict of interest.*

Post, Austin.....*Disclosed no conflict of interest.*

Postolka, Barbara*Disclosed no conflict of interest.*

Potter, Barrett G*Disclosed no conflict of interest.*

Potter, Benjamin.....*Disclosed no conflict of interest.*

Potter, Hollis G.....5: Receive institutional research support from GE Healthcare.

Potter, Hollis G.....5: GE Healthcare.

Potter, Hollis G.....5: GE Healthcare.

Potter, James*Disclosed no conflict of interest.*

Potter, Ryan S*Disclosed no conflict of interest.*

Potts, Jesse*Disclosed no conflict of interest.*

Pourzal, Robin.....5: Zimmer Biomet.

Pourzal, Robin.....5: Zimmer-Biomet.

Pourzal, Robin.....5: Zimmer.

Pozzi, Federico*Disclosed no conflict of interest.*

Prabhakar, Pooja*Disclosed no conflict of interest.*

Premkumar, Ajay7B: Elsevier.

Presciutti, Steven.....*Disclosed no conflict of interest.*

Presson, Bradley*Disclosed no conflict of interest.*

Price, Taylor.....*Disclosed no conflict of interest.*

Price, Taylor M.....*Disclosed no conflict of interest.*

Price, Taylor M.....*Disclosed no conflict of interest.*

Priddy, Lauren B......*Disclosed no conflict of interest.*

Prince, Nicole.....*Disclosed no conflict of interest.*

Prithviraj, Sujeethkumar.....*Disclosed no conflict of interest.*

Probst, Julian*Disclosed no conflict of interest.*

Proctor, Ashley*Disclosed no conflict of interest.*

Provaggi, Elena3A: Orthonika; 4: Orthonika.

Provencher, Benjamin*Disclosed no conflict of interest.*

Provencher, Matthew.....2: Arthrex, ArthroSurface; 3B: Arthrex, SLACK Inc., Joint Research Foundation; 7A: Arthrex; 7B: Elsevier Inc.; 8: Arthroscopy, Knee, Orthopedics, SLACK Inc; 9: AANA, AAOS, AOSSM, ASES, , ISAKOS, San Diego Shoulder Institute, Society of Military Orthopaedic Surgeons.

Provencher, Matthew T.1: Arthrex, Inc.; 2: Arthrex, Inc.; 3B: Arthrex, Inc., Joint Restoration Foundation (Allosource); 7B: SLACK Incorporated; 8: Arthroscopy, Knee, Orthopedics, SLACK Incorporated; 9: AAOS, American Orthopaedic Society for Sports Medicine, American Shoulder and Elbow Surgeons, Arthroscopy Association of North America, International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine, San Diego Shoulder Institute, , Society of Military Orthopaedic Surgeons.

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Pryce, Brian A*Disclosed no conflict of interest.*

Pucha, Krishna*Disclosed no conflict of interest.*

Puetzer, Jennifer.....*Disclosed no conflict of interest.*

Puetzer, Jennifer L*Disclosed no conflict of interest.*

Puetzer, Jennifer L.*Disclosed no conflict of interest.*

Pugely, Andrew J*Disclosed no conflict of interest.*

Pulasani, Sai.....*Disclosed no conflict of interest.*

Pullen, Nicholas*Disclosed no conflict of interest.*

Purdy, Kayla.....*Disclosed no conflict of interest.*

Purmessur, Devina.....*Disclosed no conflict of interest.*

Pust, Taylor M......*Disclosed no conflict of interest.*

Qi, Jun.....*Disclosed no conflict of interest.*

Qi, Xinyu*Disclosed no conflict of interest.*

Qiao, Zhen*Disclosed no conflict of interest.*

Qin, Di.....*Disclosed no conflict of interest.*

Qin, Ling.....*Disclosed no conflict of interest.*

Qin, Qizhi*Disclosed no conflict of interest.*

Qiryaqoz, Zeena*Disclosed no conflict of interest.*

Qiu, Bowen*Disclosed no conflict of interest.*

Qu, Dovina*Disclosed no conflict of interest.*

Qu, Feini*Disclosed no conflict of interest.*

Qu, Jiayi*Disclosed no conflict of interest.*

Quade, Conrad.....*Disclosed no conflict of interest.*

Quam, Vivian G.....*Disclosed no conflict of interest.*

Quang, Duy Huynh.....*Disclosed no conflict of interest.*

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Sharpe, Kipling.....2: Conformis, Baudax; 3B: Conformis, Baudax; 5: Stryker, RomTech.

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Shelburne, Kevin B......5: Kevin B. Shelburne.

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Shen, Karen.....*Disclosed no conflict of interest.*

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Smolinski, Michael P*Disclosed no conflict of interest.*

Smolinski, Patrick.....*Disclosed no conflict of interest.*

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Snyder-Mackler, Lynn*Disclosed no conflict of interest.*

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Stannard, James P.....*3B: Arthrex, DePuy, A Johnson & Johnson Company, Smith & Nephew, Orthopaedic Designs North America; 5: Arthrex, Inc, Coulter Foundation, National Institutes of Health, U.S. Department of Defense; 7B: Thieme; 8: Journal of Knee Surgery; 9: American Orthopaedic Association, AO Foundation, AO North America, Mid-America Orthopaedic Association.*

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Steineman, Brett D.*Disclosed no conflict of interest.*

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Stephenson, Stacy.....*Disclosed no conflict of interest.*

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Stewart, Elizabeth A......6: Bayer.

Stewart, Matthew.....8: Journal of Orthopaedic Research Editorial Board, Veterinary Comparative Orthopedics and Traumatology Associate Editor, European Cells and Materials Editorial Board.

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Strickland, Sabrina2: Organogenesis, Smith&Nephew, Vericel; 4: Engage; 5: JRF, Vericel; 7A: Organogenesis; 8: American Journal of Sports Medicine; 9: Arthroscopy Association of North America.

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Stubbs, Caleb*Disclosed no conflict of interest.*

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Suzuki, Shoji.....*Disclosed no conflict of interest.*

Suzuki, Sho'ji.....*Disclosed no conflict of interest.*

Suzuki, Teppei.....*Disclosed no conflict of interest.*

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Suzuki, Yuki.....*Disclosed no conflict of interest.*

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Talentino, Spencer*Disclosed no conflict of interest.*

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Tateda, Kazuhiro*Disclosed no conflict of interest.*

Tateyama, Yui*Disclosed no conflict of interest.*

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Templeton, Kimberly8: Journal of Bone and Joint Surgery - American.

Templeton, Kimberly J*Disclosed no conflict of interest.*

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Terkawi, Mohamad Alaa.....*Disclosed no conflict of interest.*

Terry, Ashley.....*Disclosed no conflict of interest.*

Testa, Edward*Disclosed no conflict of interest.*

Tetsunaga, Tomonori*Disclosed no conflict of interest.*

Teuben, Michel*Disclosed no conflict of interest.*

Tewari, Manu*Disclosed no conflict of interest.*

Tezuka, Taro*Disclosed no conflict of interest.*

Thai, Victoria*Disclosed no conflict of interest.*

Thakkar, Akshar P.*Disclosed no conflict of interest.*

Thakore, Mayur3A: Stryker; 4: Stryker.

Thakur, Ankush*Disclosed no conflict of interest.*

Thakur, Shreyasi*Disclosed no conflict of interest.*

Thampi, Parvathy*Disclosed no conflict of interest.*

Thelen, Darryl*Disclosed no conflict of interest.*

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Thi, Mia*Disclosed no conflict of interest.*

Thi, Mia M*Disclosed no conflict of interest.*

Thiessen, Adam*Disclosed no conflict of interest.*

Thirukumaran, Caroline*Disclosed no conflict of interest.*

Thomas, Leslie*Disclosed no conflict of interest.*

Thomas, Richard*Disclosed no conflict of interest.*

Thomas, Tucker*Disclosed no conflict of interest.*

Thomassen, Maja*Disclosed no conflict of interest.*

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Thomopoulos, Stavros*Disclosed no conflict of interest.*

Thompson, Jonathan3A: DePuy Synthes.

Thompson, Katherine*Disclosed no conflict of interest.*

Thompson, Katherine L.*Disclosed no conflict of interest.*

Thompson, Matthew3A: Stryker employee; 4: Stryker Corp.

Thompson, Matthew A*Disclosed no conflict of interest.*

Thomsen, Isaac P*Disclosed no conflict of interest.*

Thoreson, Andrew R*Disclosed no conflict of interest.*

Thorpe, Steven W*Disclosed no conflict of interest.*

Thottathil, Letty*Disclosed no conflict of interest.*

Thummala, Abhinav R.....*Disclosed no conflict of interest.*

Thurlow, Lance L.....*Disclosed no conflict of interest.*

Thurner, Philipp J.....*Disclosed no conflict of interest.*

Thurner, Philipp J.....*Disclosed no conflict of interest.*

Thurner, Philipp J.....*Disclosed no conflict of interest.*

Tian, Ye.....*Disclosed no conflict of interest.*

Tian, Yuan.....6: The NGF antibody using in this study were supported from Mochida Pharmaceutical CO., LTD. Tokyo Japan.

Tibrewala, Radhika*Disclosed no conflict of interest.*

Tichy, Elisia*Disclosed no conflict of interest.*

Tijerina, Jonathan D.....*Disclosed no conflict of interest.*

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Timothy, Wright.....1: Exactech Inc, Lima Corporate, Mathys Ltd; 4: orthobond; 5: Lima Corporate; 9: American Joint Replacement Registry, Orthopaedic Research and Education Foundation, Knee Society.

Ting, Kang3A: Kang Ting, Chia Soo, and Zhong Zheng are inventors on fibromodulin-related patents assigned to UCLA. Kang Ting, Chia Soo, and Zhong Zheng are founders of Scarless Laboratories Inc., which sublicenses.

Tinguely, Yann*Disclosed no conflict of interest.*

Tirumala, Venkatsaikhil*Disclosed no conflict of interest.*

Tisherman, Robert T7B: Depuy Synthes.

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Tobias, Menachem*Disclosed no conflict of interest.*

Todd, Jocelyn*Disclosed no conflict of interest.*

Toguchida, Junya*Disclosed no conflict of interest.*

Tokish, John M.....1: Arthrex; 2: Arthrex, DePuy Synthes Mitek; 3B: DePuy Synthes Mitek; 6: Arthrex; 7A: Arthrex; 8: Journal of Shoulder and Elbow Surgery Associate Editor; 9: AANA, Orthopedics Today.

Tokuhashi, Yasuaki*Disclosed no conflict of interest.*

Tolar, Jakub*Disclosed no conflict of interest.*

Toler, Krista3A: Zimmer Biomet.

Tolgyesi, Allison*Disclosed no conflict of interest.*

Tolsma, Rachael.....*Disclosed no conflict of interest.*

Toma, Takashi.....*Disclosed no conflict of interest.*

Tomaszewski, Krzysztof A.*Disclosed no conflict of interest.*

Tomita, Hiroyuki*Disclosed no conflict of interest.*

Tomita, Makoto*Disclosed no conflict of interest.*

Tommasini, Steven*Disclosed no conflict of interest.*

Tommasini, Steven M*Disclosed no conflict of interest.*

Tommasini, Steven M.*Disclosed no conflict of interest.*

Tomouk, M Wassim*Disclosed no conflict of interest.*

Tompkins, Marc A.....*Disclosed no conflict of interest.*

Tone, Shine*Disclosed no conflict of interest.*

Tong, Wei.....*Disclosed no conflict of interest.*

Tong, Weidong.....*Disclosed no conflict of interest.*

Tong, Xinming*Disclosed no conflict of interest.*

Topping, Daniel.....*Disclosed no conflict of interest.*

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Torkan, Lawrence F*Disclosed no conflict of interest.*

Torre, Olivia M.....*Disclosed no conflict of interest.*

Torres, Holly*Disclosed no conflict of interest.*

Tosi, Laura L5: Ultragenyx Pharmaceutical; 9: Osteogenesis Imperfecta Foundation Board of Directors and Medical Advisory Committee, PCORI Rare Disease Advisory Committee, American Orthopaedics Association Own the Bone Director, US Bone and Joint Initiative Board of Directors.

Toth, Alison P.....2: Vericel, Corporation; 3B: Vericel, Corporation.

Toth, Ferenc.....3B: Bridging Medical Group, LLC.

Tovar, Maria*Disclosed no conflict of interest.*

Tower, Robert J.....*Disclosed no conflict of interest.*

Towfighian, Shahrzad*Disclosed no conflict of interest.*

Toyama, Shogo*Disclosed no conflict of interest.*

Töyräs, Juha*Disclosed no conflict of interest.*

Travascio, Francesco*Disclosed no conflict of interest.*

Travers, Paul M.....*Disclosed no conflict of interest.*

Tremblay, Madeleine.....*Disclosed no conflict of interest.*

Trigg, Lina*Disclosed no conflict of interest.*

Trikalinos, Thomas.....*Disclosed no conflict of interest.*

Trikha, Rishi*Disclosed no conflict of interest.*

Trinh, Jonathan Q*Disclosed no conflict of interest.*

Triplett, Ashley*Disclosed no conflict of interest.*

Trivedi, Jay.....*Disclosed no conflict of interest.*

Trone, Matthew.....*Disclosed no conflict of interest.*

Troy, Karen L.....4: Ossanex; 8: Transactions on Neural Systems and Rehabilitation Engineering; 9: ORS New Investigator Mentoring Committee.

Troyer, Luke D.....*Disclosed no conflict of interest.*

Trudel, Yannick*Disclosed no conflict of interest.*

Truong, Walter.....*Disclosed no conflict of interest.*

Tryfonidou, Marianna*Disclosed no conflict of interest.*

Trzeciak, Marc A*Disclosed no conflict of interest.*

Tsai, Liang-Ching*Disclosed no conflict of interest.*

Tsai, Sung Huang Laurent.....*Disclosed no conflict of interest.*

Tsai, Tsung-Yuan*Disclosed no conflict of interest.*

Tsang, Shao-Ting Jerry8: Associate Editor for Bone and Joint Research.

Tschaffon, Miriam.....*Disclosed no conflict of interest.*

Tschaffon, Miriam E. A......*Disclosed no conflict of interest.*

Tse, Justin J.*Disclosed no conflict of interest.*

Tseng, Chieh.....*Disclosed no conflict of interest.*

Tseng, Wei-Ju.....*Disclosed no conflict of interest.*

Tsinman, Tonia*Disclosed no conflict of interest.*

Tsinman, Tonia K*Disclosed no conflict of interest.*

Tsourkas, Andrew4: Andrew Tsourkas is a founder and owns equity in AlphaThera.

Tsubosaka, Masanori*Disclosed no conflict of interest.*

Tsuchida, Shinji.....*Disclosed no conflict of interest.*

Tsuji, Kentaro.....*Disclosed no conflict of interest.*
Tsuji, Kunikazu.....*Disclosed no conflict of interest.*
Tsuji, Shinya.....*Disclosed no conflict of interest.*
Tsuji, Ryu.....*Disclosed no conflict of interest.*
Tsuji, Takeru.....*Disclosed no conflict of interest.*
Tu, Ji.....*Disclosed no conflict of interest.*
Tuan, Rocky.....*Disclosed no conflict of interest.*
Tuan, Rocky S.....*Disclosed no conflict of interest.*
Tuan, Rocky S.....*Disclosed no conflict of interest.*
Tuan, Rocky Sung Chi.....*Disclosed no conflict of interest.*
Tuan, Rocky Sung-Chi.....*Disclosed no conflict of interest.*
Tucker, Douglass W.....*Disclosed no conflict of interest.*
Tujiku, Shinya.....*Disclosed no conflict of interest.*
Tuladhar, Anik.....*Disclosed no conflict of interest.*
Turajane, Kathleen.....*Disclosed no conflict of interest.*
Turcu, Adrian.....*Disclosed no conflict of interest.*
Turek, Tom.....*Disclosed no conflict of interest.*
Turkmani, Amr.....*Disclosed no conflict of interest.*
Turnbull, Jacob.....*Disclosed no conflict of interest.*
Turner, Elizabeth H.G.....*Disclosed no conflict of interest.*
Turner, Jonathan.....*Disclosed no conflict of interest.*
Twaroski, Kirk.....*Disclosed no conflict of interest.*
Twomey-Kozak, John.....*Disclosed no conflict of interest.*
Tycksen, Eric D.....*Disclosed no conflict of interest.*
Tzanetis, Periklis.....*Disclosed no conflict of interest.*
Uchida, Soshi.....*Disclosed no conflict of interest.*
Ud Din, Nizam.....*Disclosed no conflict of interest.*
Uehara, Fuminari.....*Disclosed no conflict of interest.*
Ueki, Hiroko.....*Disclosed no conflict of interest.*
Uematsu, Takuya.....*Disclosed no conflict of interest.*

Uemukai, Toru*Disclosed no conflict of interest.*

Uemura, Keisuke.....*Disclosed no conflict of interest.*

Ueno, Masaya.....*Disclosed no conflict of interest.*

Uetsuki, Keita3A: Teijin Nakashima Medical Co., Ltd.

Ukeba, Daisuke.....6: Japan Agency for Medical Research and Development; 7A: Mochida Pharmaceutical Co., Ltd.

Ukishiro, Kengo.....*Disclosed no conflict of interest.*

Ulitto, Joseph.....*Disclosed no conflict of interest.*

Umpeirrez, Monica B*Disclosed no conflict of interest.*

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Unger, Jesse3A: NuVasive.

Unni, Mythreyi.....*Disclosed no conflict of interest.*

Uno, Koki*Disclosed no conflict of interest.*

Uno, Tomohiro.....*Disclosed no conflict of interest.*

Upasani, Vidyadhar.....1: OrthoPediatrics; 2: DePuy, NuVasive; 3B: Indius; 3C: EOS Imaging; 4: Imagen; 5: nView, EOS Imaging; 7B: WKH; 8: Spine.

Ura, Katsuro.....*Disclosed no conflict of interest.*

Ural, Evran*Disclosed no conflict of interest.*

Urish, Kenneth3B: yes; 5: yes; 6: yes.

Urish, Kenneth5: Smith&Nephew.

Urish, Kenneth L*Disclosed no conflict of interest.*

Urita, Atsushi*Disclosed no conflict of interest.*

Usami, Yuna.....*Disclosed no conflict of interest.*

Utomo, Lizette*Disclosed no conflict of interest.*

Utsunomiya, Hajime*Disclosed no conflict of interest.*

Utsunomiya, Takeshi*Disclosed no conflict of interest.*

Vahidi, Ghazal.....*Disclosed no conflict of interest.*

Vaidya, Rachana*Disclosed no conflict of interest.*

Vakharia, Rushabh M.....*Disclosed no conflict of interest.*

Vakili, Samira*Disclosed no conflict of interest.*

Vaksha, Vedant.....*Disclosed no conflict of interest.*

Valdevit, Antonio.....5: Foundation Fusion Solutions, LLC, dba CornerLoc, Stryker (K2M), Medtronic (Titan Spine).

Valdez, Mauricio*Disclosed no conflict of interest.*

Valente, Alexis*Disclosed no conflict of interest.*

Valentino, Alexandra3A: Stryker; 4: Stryker.

Valentino, John*Disclosed no conflict of interest.*

Valiya Kambrath, Anuradha.....*Disclosed no conflict of interest.*

van Arkel, Richard*Disclosed no conflict of interest.*

van Arkel, Richard J......*Disclosed no conflict of interest.*

van Arkel, Richard J......*Disclosed no conflict of interest.*

Van Citters, Douglas.....5: DePuy, OrthoSensor, ConforMIS, Launchpad Medical, TJO.

van der Meulen, Marjolein*Disclosed no conflict of interest.*

van der Meulen, Marjolein C.H.*Disclosed no conflict of interest.*

van der Meulen, Marjolein C.H.*Disclosed no conflict of interest.*

van der Meulen, Marjolein CH..*Disclosed no conflict of interest.*

van Dijk, Lukas A......3A: Kuros Biosciences.

van Dillen, Linda R*Disclosed no conflict of interest.*

van Eck, Carola F.*Disclosed no conflict of interest.*

Van Handel, Ben4: Carthronix Inc.

van Lenthe, G. Harry*Disclosed no conflict of interest.*

Van Nest, Duncan*Disclosed no conflict of interest.*

van Osch, Gerjo J.V.M......*Disclosed no conflict of interest.*

Van Remmen, Holly*Disclosed no conflict of interest.*

Van Roekel, Nickolas.....*Disclosed no conflict of interest.*

Van Speybroeck, Alexander*Disclosed no conflict of interest.*

Van Valin, Scott*Disclosed no conflict of interest.*

Vanasse, Tom.....3A: Exactech.

Vandenberg, Dennis*Disclosed no conflict of interest.*

Vandenburgh, Herman*Disclosed no conflict of interest.*

VanHelmond, Taylor*Disclosed no conflict of interest.*

VanHelmond, Taylor Ann*Disclosed no conflict of interest.*

Vannatta, Emily*Disclosed no conflict of interest.*

Varadarajan, Kartik1: Stryker Corp; 4: Orthopaedic Technology Group; 5: Heraeus GmbH, Depuy Synthes, Evonik; 9: Orthopaedic Research Society, Implant Section.

Varadarajan, Ravikumar3A: Zimmer Biomet; 4: Zimmer Biomet.

Varady, Nathan H*Disclosed no conflict of interest.*

Varden, Lara J*Disclosed no conflict of interest.*

Vargas, Diego*Disclosed no conflict of interest.*

Varilek, Rachel A*Disclosed no conflict of interest.*

Varney, Jessica L*Disclosed no conflict of interest.*

Vasarhelyi, Edward3B: DePuy, Hip Innovation Technology; 5: DePuy, Smith & Nephew, Stryker.

Vasarhelyi, Edward M3B: DePuy, A Johnson & Johnson Company, Hip Innovation Technology; 5: DePuy, A Johnson & Johnson Company, Smith & Nephew, Stryker.

Vashisth, Manasvita*Disclosed no conflict of interest.*

Vasileff, William*Disclosed no conflict of interest.*

Vaso, Ket*Disclosed no conflict of interest.*

Vater, Corina*Disclosed no conflict of interest.*

Vauclin, Cameron*Disclosed no conflict of interest.*

Vedanaparti, Yajnes*Disclosed no conflict of interest.*

Veeramani, Ashwin*Disclosed no conflict of interest.*

Vega-Soto, Emmanuel E*Disclosed no conflict of interest.*

Venderley, Melanie B*Disclosed no conflict of interest.*

Venkatesan, Jagadeesh K*Disclosed no conflict of interest.*

Venkatesh, Shreya*Disclosed no conflict of interest.*

Verborgt, Olivier3B: Zimmer Biomet.

Verbruggen, Anneke SK*Disclosed no conflict of interest.*

Verdonschot, Nico*Disclosed no conflict of interest.*

Vernengo, Andrea*Disclosed no conflict of interest.*

Vernon, Lauren*Disclosed no conflict of interest.*

Verstraete, Matthias3A: OrthoSensor, Inc.

Vervaecke, Alexander*Disclosed no conflict of interest.*

Vessal, Mani*Disclosed no conflict of interest.*

Vesvoranan, Oraya*Disclosed no conflict of interest.*

Vickers, Mark H.....*Disclosed no conflict of interest.*

Vidal, Armando F.2: Arthrex, Inc., Vericel; 3B: Arthrex, Inc.; 9: American Orthopaedic Society for Sports Medicine.

Vidyadhar, Upasani V1: OrthoPediatrics; 2: DePuy, NuVasive; 3B: Indius; 3C: EOS Imaging; 4: Imagen; 5: nView, EOS Imaging; 7B: WKH; 8: Spine.

Villalobos, Efren.....*Disclosed no conflict of interest.*

Villemure, Isabelle*Disclosed no conflict of interest.*

Villicana, Cassandra*Disclosed no conflict of interest.*

Vinicius Gil Alabarse, Paulo.....*Disclosed no conflict of interest.*

Vinson, Amanda L.....*Disclosed no conflict of interest.*

Viola, Dan C. M.*Disclosed no conflict of interest.*

Virdi, Amarjit S.....*Disclosed no conflict of interest.*

Virk, Sohrab*Disclosed no conflict of interest.*

Visgauss, Julia D.....*Disclosed no conflict of interest.*

Vishwanath, Karan.....3A: Jens Stabler; 3B: Courtney Ziegler; 5: Karan Vishwanath, Lawrence Bonassar.

Visnes, Håvard*Disclosed no conflict of interest.*

Vivacqua, Thiago.....*Disclosed no conflict of interest.*

Vivanco, Juan F.*Disclosed no conflict of interest.*

Vles, Georges*Disclosed no conflict of interest.*

Vo, Nam.....*Disclosed no conflict of interest.*

Volk, Susan W......*Disclosed no conflict of interest.*

Volk, Victoria L.....*Disclosed no conflict of interest.*

Voloshin, Ilya1: Arthrex, ArthroSurface, Innomed, ZimmerBiomet, Smith & Nephew; 3B: FH Orthopaedics; 9: Arthroscopy Association of North America, American Shoulder and Elbow Surgeons.

von Rechenberg, Brigitte3B: Johnson & Johnson Family of Companies; 5: Johnson & Johnson Family of Companies.

von Rechenberg, Brigitte3B: Johnson & Johnson Family of Companies; 5: Johnson & Johnson Family of Companies.

Vopat, Bryan.....3B: DePuy, A Johnson & Johnson Company; 5: Stryker.

Vopat, Bryan.....3B: DePuy, A Johnson & Johnson Company: Paid consultant; 5: Stryker: Research Support.

Vopat, Bryan G.....3B: DePuy, A Johnson & Johnson Company: Paid Consultant; 5: Stryker: Research Support.

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Vopat, Lisa*Disclosed no conflict of interest.*

Vopat, Matthew*Disclosed no conflict of interest.*

Vopat, Matthew L.....*Disclosed no conflict of interest.*

Vopat, Matthew L.....*Disclosed no conflict of interest.*

Vorrius, Brandon.....*Disclosed no conflict of interest.*

Vosselman, Anne L.....*Disclosed no conflict of interest.*

Vresilovic, Edward*Disclosed no conflict of interest.*

Vris, Alexandros.....*Disclosed no conflict of interest.*

Vu, Ashley A.....*Disclosed no conflict of interest.*

Vunjak-Novakovic, Gordana*Disclosed no conflict of interest.*

Wachs, Rebecca A.....*Disclosed no conflict of interest.*

Wadhwa, Harsh*Disclosed no conflict of interest.*

Wagala, Nyaluma.....*Disclosed no conflict of interest.*

Wagley, Yadav*Disclosed no conflict of interest.*

Wagner, Linzie*Disclosed no conflict of interest.*

Wagner, Phillip P*Disclosed no conflict of interest.*

Wahbeh, Jenna*Disclosed no conflict of interest.*

Wahlen, Trenten.....*Disclosed no conflict of interest.*

Wakabayashi, Hiroki*Disclosed no conflict of interest.*

Wakama, Hitoshi*Disclosed no conflict of interest.*

Walck, Christine.....*Disclosed no conflict of interest.*

Waldman, Olivia*Disclosed no conflict of interest.*

Waldman, Stephen D.....*Disclosed no conflict of interest.*

Waldorff, Erik.....*Disclosed no conflict of interest.*

Walia, Bhavita.....*Disclosed no conflict of interest.*

Walk, Remy.....*Disclosed no conflict of interest.*

Walk, Remy E.....*Disclosed no conflict of interest.*

Walk, Seth*Disclosed no conflict of interest.*

Walker, J. Todd*Disclosed no conflict of interest.*

Walker, Lizzie*Disclosed no conflict of interest.*

Walker, Paul*Disclosed no conflict of interest.*

Walker, Peter.....*1: Royalties from Stryker and from ZimmerBiomet for Total Knee design; 4: Stock in Genovel Inc through Office of Industrial Liaison, NYU Langone Health; 7A: Springer Nature for a book The Artificial Knee: an Ongoing Evolution; 8: Journal of Arthroplasty, Journal of Biomechanics, Journal of Biomedical; 9: International Society for Technology in Arthroplasty ISTA.*

Walker, Peter S.*1: Stryker, ZimmerBiomet; 4: Genovel; 8: Journal of Arthroplasty.*

Walker, Richard E.A.*Disclosed no conflict of interest.*

Wallace, Anna.....*3A: Johnson & Johnson; 4: Johnson & Johnson.*

Wallace, Erin.....*Disclosed no conflict of interest.*

Wallace, Joseph*Disclosed no conflict of interest.*

Wallace, Joseph M.....*Disclosed no conflict of interest.*

Wallace, Roseanna.....*Disclosed no conflict of interest.*

Walrath, Evan*Disclosed no conflict of interest.*

Walsh, Conor*Disclosed no conflict of interest.*

Walsh, William.....*4: Biorez.*

Walter, Adam*Disclosed no conflict of interest.*

Walter, Benjamin.....*Disclosed no conflict of interest.*

Walter, Frédéric.....*Disclosed no conflict of interest.*

Walton, David.....*Disclosed no conflict of interest.*

Wang, Allan*3B: Exactech, Inc.*

Wang, Chao*Disclosed no conflict of interest.*

Wang, Chau-Zen.....*Disclosed no conflict of interest.*

Wang, Chenyang.....*Disclosed no conflict of interest.*

Wang, Chongyang.....*Disclosed no conflict of interest.*

Wang, Cong.....*Disclosed no conflict of interest.*

Wang, Cuicui*Disclosed no conflict of interest.*

Wang, Dalin*Disclosed no conflict of interest.*

Wang, Dan*Disclosed no conflict of interest.*

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Wang, Dong4: Co-founder of Ensign Pharmaceutical.

Wang, Edward*Disclosed no conflict of interest.*

Wang, Edward D.*Disclosed no conflict of interest.*

Wang, James H-C*Disclosed no conflict of interest.*

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Wang, Jasmine*Disclosed no conflict of interest.*

Wang, Jinxi*Disclosed no conflict of interest.*

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Wang, Lai*Disclosed no conflict of interest.*

Wang, Lijun*Disclosed no conflict of interest.*

Wang, Lin3A: DePuy Synthes.

Wang, Ling*Disclosed no conflict of interest.*

Wang, Linshanshan*Disclosed no conflict of interest.*

Wang, Liyun*Disclosed no conflict of interest.*

Wang, Luqiang*Disclosed no conflict of interest.*

Wang, Michelle Dan*Disclosed no conflict of interest.*

Wang, Minghui*Disclosed no conflict of interest.*

Wang, Mingjiu*Disclosed no conflict of interest.*

Wang, Pengju*Disclosed no conflict of interest.*

Wang, Shangcheng*Disclosed no conflict of interest.*

Wang, Shangping*Disclosed no conflict of interest.*

Wang, Sun Young*Disclosed no conflict of interest.*

Wang, Tian*Disclosed no conflict of interest.*

Wang, Tianbai*Disclosed no conflict of interest.*

Wang, Vincent5: Coloplast Corp.; 9: ORS.

Wang, Vincent9: ORS.

Wang, Vincent M9: ORS.

Wang, WeiDisclosed no conflict of interest.

Wang, Wenzheng.....Disclosed no conflict of interest.

Wang, XiaoduDisclosed no conflict of interest.

Wang, XinluanDisclosed no conflict of interest.

Wang, Yamin.....Disclosed no conflict of interest.

Wang, YicunDisclosed no conflict of interest.

Wang, Yiyun.....Disclosed no conflict of interest.

Wang, Yong.....Disclosed no conflict of interest.

Wang, Yunjia.....Disclosed no conflict of interest.

Wang, ZexiDisclosed no conflict of interest.

Wang, Zhao.....Disclosed no conflict of interest.

Wang, ZhenggangDisclosed no conflict of interest.

Wang, ZiliDisclosed no conflict of interest.

Wanger, Brett ADisclosed no conflict of interest.

Wangler, SebastianDisclosed no conflict of interest.

Wapp, ChristinaDisclosed no conflict of interest.

Ward, Christopher W.Disclosed no conflict of interest.

Ward, Samuel RDisclosed no conflict of interest.

Ward, Sarah6: Fellowship support: Stryker and Smith & Nephew.

Warden, StuartDisclosed no conflict of interest.

Warnecke, Daniela.....Disclosed no conflict of interest.

Warren, James PDisclosed no conflict of interest.

Warren, MichaelDisclosed no conflict of interest.

Warren, Russell F1: Arthrex, Inc.

Warren, Russell F4: Orthonet.

Waryasz, Gregory.....Disclosed no conflict of interest.

Waseda, YuyaDisclosed no conflict of interest.

Wastvedt, SolvejgDisclosed no conflict of interest.

Watanabe, GoroDisclosed no conflict of interest.

Watanabe, Hiroshi*Disclosed no conflict of interest.*

Watanabe, Keiichiro*Disclosed no conflict of interest.*

Watanabe, Kota*Disclosed no conflict of interest.*

Watanabe, Nobuyoshi*Disclosed no conflict of interest.*

Watanabe, Ryota3A: Teijin Nakashima Medical Co., Ltd.

Watanabe, Shu*Disclosed no conflict of interest.*

Watchmaker, Lauren E.....*Disclosed no conflict of interest.*

Watkins, Beckham*Disclosed no conflict of interest.*

Watters, Rebecca.....*Disclosed no conflict of interest.*

Watters, Rebecca J.....*Disclosed no conflict of interest.*

Watts, Jeffrey C.....*Disclosed no conflict of interest.*

Weaver, Michael J.....*Disclosed no conflict of interest.*

Webb, Brian.....*Disclosed no conflict of interest.*

Weber, Alexander E*Disclosed no conflict of interest.*

Weber, Birte*Disclosed no conflict of interest.*

Weber, Christian*Disclosed no conflict of interest.*

Weber, Christian I*Disclosed no conflict of interest.*

Weber, Margaret A*Disclosed no conflict of interest.*

Weber, Margaret Ann.....*Disclosed no conflict of interest.*

Webster, Kate E*Disclosed no conflict of interest.*

Webster, Thomas.....*Disclosed no conflict of interest.*

Wee, Hwa Bok*Disclosed no conflict of interest.*

Wee, Zong-Rui3A: MedShape.

Weekes, Kenneth.....*Disclosed no conflict of interest.*

Wegner, MD, PhD, Adam.....*Disclosed no conflict of interest.*

Wei, Fei.....*Disclosed no conflict of interest.*

Wei, Jianlu*Disclosed no conflict of interest.*

Wei, Lei*Disclosed no conflict of interest.*

Wei, Wu.....*Disclosed no conflict of interest.*

Wei, Xin*Disclosed no conflict of interest.*

Wei, Yulong*Disclosed no conflict of interest.*

Weihrauch, Dorothee*Disclosed no conflict of interest.*

Weinberg, J. Brice*Disclosed no conflict of interest.*

Weiner, Adam.....*Disclosed no conflict of interest.*

Weiner, Bradley K.....*Disclosed no conflict of interest.*

Weingast, Giulia.....*Disclosed no conflict of interest.*

Weis, MaryAnn*Disclosed no conflict of interest.*

Weisberg, Miriam D*Disclosed no conflict of interest.*

Weiser, Jennifer R.....*Disclosed no conflict of interest.*

Weiss, Arnold-Peter.....4: Loci Orthopedics.

Weiss, Arnold-Peter C4: Loci Orthopedics.

Weiss, Jeffrey.....*Disclosed no conflict of interest.*

Weiss, Kurt.....*Disclosed no conflict of interest.*

Weiss, Kurt R*Disclosed no conflict of interest.*

Weiss, Lindsey*Disclosed no conflict of interest.*

Weiss, Rich.....3A: Radius Health Inc; 4: Radius Health Inc.

Weiss, Stephanie*Disclosed no conflict of interest.*

Weiss, Stephanie N*Disclosed no conflict of interest.*

Weisse, Bernhard.....5: Zimmer Biomet, Winterthur, Switzerland.

Welch, William.....4: Transcendental Spine-stock ownership; 5: Grant support-Premia Spine & Empirical Spine; 8: Associate Editorial Board Spine, Associate editor Journal of the American College of Surgeons, Assistant editor European Spine Journal.

Welhaven, Hope*Disclosed no conflict of interest.*

Welhaven, Hope D*Disclosed no conflict of interest.*

Wellman, David2: Depuy, A Johnson & Johnson Company; 3B: OrthoDevelopment; 4: Imagen; 8: HSS Journal.

Wells, Joel.....*Disclosed no conflict of interest.*

Wells, Joel E*Disclosed no conflict of interest.*

Wells, Joel E.*Disclosed no conflict of interest.*

Wells, Kristina V*Disclosed no conflict of interest.*

Wellsandt, Elizabeth*Disclosed no conflict of interest.*

Welsh, Clayton.....*Disclosed no conflict of interest.*

Wen, Yujing*Disclosed no conflict of interest.*

Wenke, Joseph C.....*Disclosed no conflict of interest.*

Wentz, Douglas.....*3B: Exactech Inc.*

Werner, Frederick W.....*4: Moximed; 5: Stryker; 9: Hand and Wrist Biomechanics International.*

Werpy, Natasha*Disclosed no conflict of interest.*

Wesdorp, Marinus Anthonie (Tim) *Disclosed no conflict of interest.*

Wesorick, Benjamin R.....*Disclosed no conflict of interest.*

Westendorf, Jennifer*Disclosed no conflict of interest.*

Weston, Jacob.....*Disclosed no conflict of interest.*

Westrich, Geoffrey.....*1: Stryker; 3B: Stryker; 5: Stryker.*

Westrich, Geoffrey.....*1: Exactech Inc, Stryker; 2: Exactech Inc, Mallinckrodt Pharmaceuticals, Stryker; 3B: Exactech Inc, Stryker; 5: Exactech Inc, Stryker; 9: Eastern Orthopedic Association, Knee Society.*

Westrich, Geoffrey.....*1: Exactech, Inc, Stryker; 2: Exactech, Inc, Mallinckrodt Pharmaceuticals, Stryker; 3B: Exactech, Inc, Stryker; 5: Exactech, Inc, Stryker; 9: Eastern Orthopedic Association, Knee Society.*

Westrich, Geoffrey.....*3B: Stryker.*

Westrick, Edward.....*Disclosed no conflict of interest.*

Wheatley, Benjamin M*5: Johnson and Johnson donated the hardware and sawbones.*

Wheeler, Tibra A.....*Disclosed no conflict of interest.*

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Whitaker, Dustin.....*3A: DePuy Synthes; 4: DePuy Synthes.*

White, Christopher A*Disclosed no conflict of interest.*

White, Stephen E*3A: DePuy Synthes Inc.*

White, Tyler*Disclosed no conflict of interest.*

Whitney, Kaitie*Disclosed no conflict of interest.*

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Whittam, David.....*Disclosed no conflict of interest.*

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Whittier, Danielle E.....*Disclosed no conflict of interest.*

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Wiater, Patrick.....3B: DePuy, A Johnson & Johnson Company.

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Wick, Joseph B*Disclosed no conflict of interest.*

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Wiens, Charmaine.....*Disclosed no conflict of interest.*

Wilcox, Ruth5: DePuy Synthes; 6: DePuy Synthes.

Wilcox, Ruth K5: DePuy Sythnes; 6: DePuy Sythnes; 8: Journal of Engineering in Medicine.

Wildeman, Bethany*Disclosed no conflict of interest.*

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Wilke, Hans-Joachim.....*Disclosed no conflict of interest.*

Wilken, Jason M......*Disclosed no conflict of interest.*

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Wilkinson, Mark*Disclosed no conflict of interest.*

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Willey, Michael*Disclosed no conflict of interest.*

Williams, Andy.....2: Smith and Nephew; 3C: Innovate Orthopaedics; 4: Orthonika, Innovate Orthopaedics; 5: Smith and Nephew; 8: American Journal of Sports Medicine Board.

Williams, Ashley*Disclosed no conflict of interest.*

Williams, Ashley A*Disclosed no conflict of interest.*

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Williams, Caroline*Disclosed no conflict of interest.*

Williams, Dale*Disclosed no conflict of interest.*

Williams, David*Disclosed no conflict of interest.*

Williams, Greg3A: NuVasive.

Williams, Jack R*Disclosed no conflict of interest.*

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Williams, Spencer*Disclosed no conflict of interest.*

Williamson, Kelly M*Disclosed no conflict of interest.*

Willing, Rayan*3B: R. Willing; 3B; Lima. 5; Stryker.*

Willing, Ryan.....*3B: LimaCorporate; 5: Stryker.*

Willing, Ryan.....*5: Stryker.*

Willing, Ryan.....*3B: Lima Corp; 5: Stryker.*

Willing, Ryan.....*3B: Lima; 5: Stryker.*

Willman, Melissa A*Disclosed no conflict of interest.*

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Wilson, David AJ*Disclosed no conflict of interest.*

Wilson, Janie L*3B: Stryker Orthopaedics.*

Wilson, Kyle*Disclosed no conflict of interest.*

Wilson, Pete.....*3A: ReGelTec Inc; 4: ReGelTec Inc; 5: ReGelTec Inc; 6: ReGelTec Inc.*

Wilson, Robert L.*Disclosed no conflict of interest.*

Wilson, Stephen P.....*Disclosed no conflict of interest.*

Wimmer, Markus A.....*6: CeramTec GmbH, Germany.*

Wimmer, Markus A.....*5: Zimmer Biomet.*

Winalski, Carl*3B: Siemens Medical Solutions Inc. USA.*

Winalski, Carl S*3B: Medical Metrics, Inc, BioClinica, Inc, PAREXEL International Corporation, CartiHeal Ltd; 4: Pfizer Inc, General Electric Company.*

Winalski, Carl S*3B: Siemens.*

Winalski, Carl S.*3B: Siemens Medical Solutions Inc. USA.*

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Wintring, Allison J*Disclosed no conflict of interest.*

Winzenrieth, Renaud*Disclosed no conflict of interest.*

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Wise, Brian C*Disclosed no conflict of interest.*

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Wittstein, Jocelyn6: Arthrex, Prodigy Surgical, Aesculap Biologics.

Wittstein, Jocelyn R6: Aesculap Biologics, Arthrex, Prodigy Surgical.

Wittstein, Jocelyn R3B: Prodigy Surgical, Arthrex.

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Wojtkiewicz, Gregory R*Disclosed no conflict of interest.*

Wojtys, Edward M7B: AOSSM Medical Publishing Board; 8: Sports Health: A Multidisciplinary Approach.

Wojtys, Edward M7B: Sports Health journal; 8: Sports Health journal; 9: AOSSM.

Wolf, Alon*Disclosed no conflict of interest.*

Wolfe, Preston N*Disclosed no conflict of interest.*

Wolfe, Scott W1: Extremity Medical; 2: TriMed, Extremity Medical; 3B: Conventus, Cartiva, Extremity Medical; 5: Conventus, Cartiva; 7A: Extremity Medical; 7B: Elsevier, Inc.

Wolfson, Julian*Disclosed no conflict of interest.*

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Wong, Daniel*Disclosed no conflict of interest.*

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Wong, Jason.....*Disclosed no conflict of interest.*

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Wong, Murray T.....*Disclosed no conflict of interest.*

Wong, Ronald Man Yeung*Disclosed no conflict of interest.*

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Wood, Ronald W.....*Disclosed no conflict of interest.*

Wood, Taylor R.*Disclosed no conflict of interest.*

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Woodard, Erik.....3A: Erik Woodard.

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Woolley, Katherine*Disclosed no conflict of interest.*

Woolley, William John*Disclosed no conflict of interest.*

Working, Zachary M......*Disclosed no conflict of interest.*

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Workman, Kalain Kristofer.....*Disclosed no conflict of interest.*

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Wright, Melissa.....*Disclosed no conflict of interest.*

Wright, Rick W4: Responsive Arthroscopy; 7A: Responsive Arthroscopy; 7B: Wolters Kluwer Lippincott, Williams and Wilkins; 8: J Bone Joint Surg Am, J Knee Surg, Clin Orthop Relat Res; 9: Am Board of Ortho Surg, Am Ortho Association.

Wright, Thomas3B: Exactech, Inc; 7A: Exactech, Inc.

Wright, Timothy.....1: Exactech Inc.

Wright, Timothy.....1: Exactech Inc, Lima Corporate, Mathys Ltd; 4: Orthobond; 5: Lima Corporate; 9: American Joint Replacement Registry, Orthopaedic Research and Education Foundation, Knee Society.

Wroblewski, Olga MDisclosed no conflict of interest.

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Wyse Jackson, ThomasDisclosed no conflict of interest.

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Wyss, Joseph.....3A: DePuy Synthes.

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Xiao, Yang.....Disclosed no conflict of interest.

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Xie, WanqingDisclosed no conflict of interest.
Xing, LianpingDisclosed no conflict of interest.
Xing, Yuan.....Disclosed no conflict of interest.
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Xu, Jiajia.....Disclosed no conflict of interest.
Xu, JianruiDisclosed no conflict of interest.
Xu, LiangDisclosed no conflict of interest.
XU, Sparrow HongtaoDisclosed no conflict of interest.
Xu, Tao.....Disclosed no conflict of interest.
Xu, Xiaoyu.....Disclosed no conflict of interest.
Xu, Yue.....Disclosed no conflict of interest.
Xu, ZhongliDisclosed no conflict of interest.
Yacovelli, Steven.....Disclosed no conflict of interest.
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Yahiro, ShunsukeDisclosed no conflict of interest.
Yakkanti, Ramakanth ReddyDisclosed no conflict of interest.
Yamada, Hiroshi.....Disclosed no conflict of interest.
Yamada, JunichiDisclosed no conflict of interest.
Yamada, Katsuhisa.....Disclosed no conflict of interest.
Yamada, Kazuki.....Disclosed no conflict of interest.
Yamaguchi, Jonathan.....Disclosed no conflict of interest.
Yamaguchi, JunDisclosed no conflict of interest.
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Yamakawa, Satoshi.....Disclosed no conflict of interest.
Yamamoto, KazuhiroDisclosed no conflict of interest.
Yamamoto, Noriko.....Disclosed no conflict of interest.
Yamamoto, TetsuyaDisclosed no conflict of interest.

Yamashita, Takahiro*Disclosed no conflict of interest.*

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Yanke, Adam B3B: CONMED Linvatec, JRF Ortho, Olympus; 3C: PatientIQ, Smith&Nephew, Sparta Biomedical; 4: PatientIQ; 5: Arthrex Inc, Organogenesis, Vericel.

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Yokota, Shunichi*Disclosed no conflict of interest.*

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Yokota, Yutaka.....*Disclosed no conflict of interest.*

Yoneno, Moe*Disclosed no conflict of interest.*

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Yoo, Jeong Joon3B: Corentec company.

Yoon, Jae Youn*Disclosed no conflict of interest.*

Yoshida, Aki*Disclosed no conflict of interest.*

Yoshihara, Aritoshi*Disclosed no conflict of interest.*

Yoshii, Yuichi.....*Disclosed no conflict of interest.*

Yoshikawa, Ryo.....*Disclosed no conflict of interest.*

Yoshikawa, Tomoya*Disclosed no conflict of interest.*

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Yotsumoto, Tadahiko.....*Disclosed no conflict of interest.*

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Yu, Eric Y.*Disclosed no conflict of interest.*

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Yusa, Fumie*Disclosed no conflict of interest.*

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Zhang, Bin.....*Disclosed no conflict of interest.*

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Zhang, Chenghao*Disclosed no conflict of interest.*

Zhang, Fenglin.....*Disclosed no conflict of interest.*

Zhang, Guofang.....*Disclosed no conflict of interest.*

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Zhang, Hengwei*Disclosed no conflict of interest.*

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Zheng, Zhong3A: Kang Ting, Chia Soo, and Zhong Zheng are inventors on fibromodulin-related patents assigned to UCLA. Kang Ting, Chia Soo, and Zhong Zheng are founders of Scarless Laboratories Inc., which sublicenses.

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Zhu, Shawn Xiaobo*Disclosed no conflict of interest.*

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Zhu, Weihong*Disclosed no conflict of interest.*

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Zink, Thomas.....*Disclosed no conflict of interest.*

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Zlepper, Zach*Disclosed no conflict of interest.*

Zlotnick, Hannah M.....*Disclosed no conflict of interest.*

Zojaji, Mahsa*Disclosed no conflict of interest.*

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Zwingenberger, Stefan.....2: Speaker for AO Trauma and DWG; 5: Research funding by the Cayman Biomedical Research Institute (CaBRI).