

## ORS 2022 Disclosure Index

**Abbasian, Mohammadreza** .....Disclosed no conflict of interest.

**Abdeen, Ayesha** .....Disclosed no conflict of interest.

**Abdel, Matthew** .....7A: Stryker; 7B: Springer; 9: AAOS.

**Abdul, Temilola** .....Disclosed no conflict of interest.

**Abe, Yuichiro** .....Disclosed no conflict of interest.

**Abe, Yuichihiro** .....Disclosed no conflict of interest.

**Abraham, Adam C** .....Disclosed no conflict of interest.

**Abraham, Adam C.** .....Disclosed no conflict of interest.

**Abraham, Paul F** .....Disclosed no conflict of interest.

**Afara, Isaac O** .....Disclosed no conflict of interest.

**Agarwal, Pranay** .....Disclosed no conflict of interest.

**Agarwal, Sanchita** .....Disclosed no conflict of interest.

**Agel, Julie** .....Disclosed no conflict of interest.

**Agrawal, Praful** .....3A: Intuitive Surgical Inc.

**Ahamed, Fayyaz** .....Disclosed no conflict of interest.

**Ahmad, Mubashir** .....Disclosed no conflict of interest.

**Ahmed, Rafay** .....Disclosed no conflict of interest.

**Ahmed, Saima** .....Disclosed no conflict of interest.

**Ahn, Taeyong** .....Disclosed no conflict of interest.

**Aibinder, William** .....3B: Exactech, Inc.

**Aitken, Holly D** .....Disclosed no conflict of interest.

**Akanda, Shamimur Rahman** ....Disclosed no conflict of interest.

**Akbar, Moeed** .....Disclosed no conflict of interest.

**Akk, Antonina K** .....Disclosed no conflict of interest.

**Akkus, Zeynettin** .....Disclosed no conflict of interest.

**Al Zoubi, Farid** .....Disclosed no conflict of interest.

**Al-Adlaan, Assad A** .....Disclosed no conflict of interest.

**Alagha, Hadi**.....Disclosed no conflict of interest.

**Albert, Hanne** .....Disclosed no conflict of interest.

**Albro, Michael B** .....Disclosed no conflict of interest.

**Alder, Karem**.....Disclosed no conflict of interest.

**Alepuz, Adrian J** .....Disclosed no conflict of interest.

**Alexander, Peter G** .....Disclosed no conflict of interest.

**Alexandrov, Alexander** .....Disclosed no conflict of interest.

**Alfayyadh, Abdulmajeed**.....Disclosed no conflict of interest.

**Alford, Andrea** .....Disclosed no conflict of interest.

**Alhamad, Mostafa**.....Disclosed no conflict of interest.

**Alhasan, Hend**.....Disclosed no conflict of interest.

**Ali, Azhar A** .....3A: Stryker.

**Aliakbarighavimi, Soheila**.....Disclosed no conflict of interest.

**Alighanbari, Mohsen** .....Disclosed no conflict of interest.

**Alini, Mauro** .....7B: JOR Spine, ORS; 8: JOR Spine.

**Allan-Rahill, Nathaniel H** .....Disclosed no conflict of interest.

**Allen, Christine** .....3A: KenSci, Inc.

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

**Alvarez, Jonathan** .....Disclosed no conflict of interest.

**Amadio, Joseph M** .....Disclosed no conflict of interest.

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

**Ambite, Ines**.....Disclosed no conflict of interest.

**Ambrosi, Thomas**.....Disclosed no conflict of interest.

**Ampadi Ramachandran, Remya**Disclosed no conflict of interest.

**Anabaraonye, Nancy** .....Disclosed no conflict of interest.

**Anantha Krishnan, Ahilan** .....Disclosed no conflict of interest.

**Andarawis-Puri, Nelly**.....Disclosed no conflict of interest.

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

**Anderson, Andrew E**.....Disclosed no conflict of interest.

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

**Anderson, Don** ..... 4: Iowa Simulation Solutions, LLC.

**Anderson, Don** ..... 4: Iowa Simulation Solutions.

**Anderson, Don D** ..... *Disclosed no conflict of interest.*

**Anderson, Don D.** ..... 4: Iowa Simulation Solutions.

**Anderst, William** ..... 9: CSRS Grants Committee.

**Anderst, William** ..... 9: CSRS.

**Anderst, William** ..... 5: Smith & Nephew; 9: CSRS Grants Committee.

**Andre, Graham** ..... *Disclosed no conflict of interest.*

**Andreassen, Thor E** ..... *Disclosed no conflict of interest.*

**Angibaud, Laurent D** ..... 3A: Exactech.

**Ansari, Mohammad Y** ..... *Disclosed no conflict of interest.*

**Antonyak, Mark A** ..... *Disclosed no conflict of interest.*

**Antrobus, Romare** ..... *Disclosed no conflict of interest.*

**Applegate, Lee** ..... *Disclosed no conflict of interest.*

**Aram, Luke J.** ..... 3A: DePuy Synthes; 4: Johnson and Johnson.

**Arjmand, Navid** ..... *Disclosed no conflict of interest.*

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

**Arteaga, Alexandra** ..... *Disclosed no conflict of interest.*

**Arts, Jacobus J.** ..... *Disclosed no conflict of interest.*

**Artzi, Natalie** ..... *Disclosed no conflict of interest.*

**Aruwajoye, Olumide** ..... *Disclosed no conflict of interest.*

**Asano, Tsuyoshi** ..... *Disclosed no conflict of interest.*

**Ashmyan, Roman** ..... *Disclosed no conflict of interest.*

**Ashraf, Sadaf** ..... *Disclosed no conflict of interest.*

**Assi, Sereen A** ..... *Disclosed no conflict of interest.*

**Ateshian, Gerard A** ..... *Disclosed no conflict of interest.*

**Athwal, George S.** ..... *Disclosed no conflict of interest.*

**Atkins, Penny R** ..... *Disclosed no conflict of interest.*

**Atkinson, John P.** ..... *Disclosed no conflict of interest.*

**Ausman, Robin** ..... *Disclosed no conflict of interest.*

**Avalos, Pablo** .....Disclosed no conflict of interest.

**Awosanya, Olatundun D.** .....Disclosed no conflict of interest.

**Ayres, Douglas K.** .....Disclosed no conflict of interest.

**Ayushman, Manish**.....Disclosed no conflict of interest.

**Azar, Tala** .....Disclosed no conflict of interest.

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

**Babikian, George M.**.....1: Smith Nephew; 2: Smith Nephew; 3B: Smith Nephew.

**Back, Jungho** .....Disclosed no conflict of interest.

**Badura, Jeffrey M.** .....3A: Medtronic; 4: Medtronic.

**Bae, Hyun**.....1: DePuy J&J, Nuvasive, Stryker, Zimmer Biomet; 3B: DePuy J&J, Nuvasive, Stryker, Zimmer Biomet; 4: DePuy J&J, Prosidian, Medtronic; 5: Medtronic, Spine Art, Nuvasive, Mesoblast, Limiflex Spine, Intrinsic Therapeutics; 9: Korean American Spine Society, Engage Surgical.

**Baez, Rafael** .....3A: Stryker; 4: Stryker.

**Bahk, Ji Hoon** .....Disclosed no conflict of interest.

**Bahney, Chelsea** .....1: Iota Biosciences; 9: Orthopaedic Research Society, Tissue Engineering and Regenerative Medicine International Society, Orthopaedic Trauma Association.

**Bahney, Chelsea** .....1: TERMIS, OTA, Iota Biosciences; 9: Orthopaedic Research Society.

**Bailey, Jeannie** .....Disclosed no conflict of interest.

**Bailey, Jeannie F** .....3B: Hinge Health; 4: Bioniks.

**Baitner, Miriam** .....Disclosed no conflict of interest.

**Bajpayee, Ambika**.....Disclosed no conflict of interest.

**Baker, Andrew** .....1: Viscus.

**Baker, Bree** .....Disclosed no conflict of interest.

**Baker, Brendon M** .....Disclosed no conflict of interest.

**Ball, Erin E.** .....Disclosed no conflict of interest.

**Ball, Hope C.**.....Disclosed no conflict of interest.

**Ballatori, Alexander**.....Disclosed no conflict of interest.

**Bandi, Marc**.....3A: Zimmer Biomet; 4: Zimmer Biomet.

**Banffy, Michael B** .....2: Smith and Nephew; 3B: Smith and Nephew, Stryker, Vericel.

**Banks, Scott** .....1: DJO, Stryker; 2: DJO; 3B: DJO, MicroPort, OnPoint; 4: OnPoint; 9: ISTA.

**Bansal, Sachi** .....Disclosed no conflict of interest.

**Bansal, Sonia**.....*Disclosed no conflict of interest.*

**Bao, Guangyu** .....*Disclosed no conflict of interest.*

**Barajas, J. Nicholas** .....*Disclosed no conflict of interest.*

**Barba, Adriana**.....*Disclosed no conflict of interest.*

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

**Barcellona, Marcos**.....*Disclosed no conflict of interest.*

**Baré, Jonathan**.....1: Corin; 2: Corin; 3B: Corin, MatOrtho; 3C: 360 Med Care; 4: Corin, 360 Med Care; 5: MatOrtho.

**Barg, Alexej**.....*Disclosed no conflict of interest.*

**Barreto, Gonçalo** .....*Disclosed no conflict of interest.*

**Barton, Kristen**.....*Disclosed no conflict of interest.*

**Batailler, Cecile** .....*Disclosed no conflict of interest.*

**Baumann, Jack R**.....*Disclosed no conflict of interest.*

**Bautista, Andre**.....*Disclosed no conflict of interest.*

**Bautista, Catherine A** .....*Disclosed no conflict of interest.*

**Bayer, Steve**.....*Disclosed no conflict of interest.*

**Bayram, Banu** .....*Disclosed no conflict of interest.*

**Beaule, Paul** .....1: Medacta, MicroPort, MatOrtho, Corin; 3B: MicroPort, DePuy Synthes, Zimmer Biomet, MatOrtho; 5: MicroPort Orthopedics, DePuy/Johnson & Johnson, Zimmer Biomet, Corin, Medacta; 7B: Wolters Kluwer; 9: International Society for Hip Arthroscopy.

**Beaule, Paul E** .....1: Medacta, MicroPort, MatOrtho, Corin; 3B: MicroPort, DePuy Synthes, Zimmer Biomet, MatOrtho; 5: MicroPort Orthopedics, DePuy/Johnson & Johnson, Zimmer Biomet, Corin, Medacta; 9: International Society for Hip Arthroscopy.

**Beck, Belinda B** .....3A: The Bone Clinic.

**Beena Valsan, Vaishnavi** .....*Disclosed no conflict of interest.*

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

**Bell, Rebecca**.....*Disclosed no conflict of interest.*

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

**Bellido, Teresita**.....*Disclosed no conflict of interest.*

**Benetti, Edmondo** .....*Disclosed no conflict of interest.*

**Bensreti, Husam Eldin** .....*Disclosed no conflict of interest.*

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

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

**Bergstrom, Annika**.....Disclosed no conflict of interest.

**Berman, Alycia**.....Disclosed no conflict of interest.

**Berry, Daniel** .....3B: Bodycad, DePuy; 4: Bodycad; 5: DePuy; 7A: DePuy; 7B: Elsevier, Wolters Kluwer Health - Lippincott Williams & Wilkins; 8: Journal of Bone and Joint Surgery - American; 9: Current Concepts in Joint Replacement (Hip Society and Knee Society), International Hip Society, Orthopaedic Research and Education Foundation, Mayo Clinic Board of Governors.

**Berube, Erin** .....Disclosed no conflict of interest.

**Best, Matthew J**.....Disclosed no conflict of interest.

**Bettencourt, Jacob** .....Disclosed no conflict of interest.

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

**Bhadouria, Neharika** .....Disclosed no conflict of interest.

**Bhakhri, Rhea** .....Disclosed no conflict of interest.

**Bhutani, Nidhi**.....Disclosed no conflict of interest.

**Biguetti, Claudia** .....Disclosed no conflict of interest.

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

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

**Binder-Markey, Benjamin I** .....Disclosed no conflict of interest.

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

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

**Blatter, Iris** .....3A: Zimmer Biomet.

**Block, Julie** .....Disclosed no conflict of interest.

**Blokpoel Ferreras, Lia**.....Disclosed no conflict of interest.

**Blossser, Rachel J**.....Disclosed no conflict of interest.

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

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

**Böhm, Harald**.....Disclosed no conflict of interest.

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

**Bollag, Wendy B** .....Disclosed no conflict of interest.

**Bonewald, Lynda** .....Disclosed no conflict of interest.

**Bonnevie, Edward** .....3A: Johnson and Johnson.

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

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

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

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

**Bostrom, Mathias** .....3B: Smith & Nephew, Memphis, TN, paid consultant.

**Bostrom, Mathias** .....1: Smith & Nephew.

**Bostrom, Mathias P.g.** .....3B: Smith & Nephew.

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

**Bouxsein, Mary L** .....Disclosed no conflict of interest.

**Bouxsein, Mary L.** .....3B: Keros Therapeutics; 4: Keros Therapeutics, Acceleron Pharma; 9: Executive Committee of the American Society of Bone and Mineral Research.

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

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

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

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

**Bradley, Patrick X** .....Disclosed no conflict of interest.

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

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

**Brama, Pieter** .....Disclosed no conflict of interest.

**Brendel, Matt** .....Disclosed no conflict of interest.

**Briggs, Karen** .....Disclosed no conflict of interest.

**Brillinger, Julia** .....Disclosed no conflict of interest.

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

**Brophy, Robert** .....8: Journal of the American Academy of Orthopaedic Surgery, American Journal of Sports Medicine.

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

**Browe, David** .....Disclosed no conflict of interest.

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

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

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

**Brucato, Valerio** .....Disclosed no conflict of interest.

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

**Brudnicki, Philip**.....Disclosed no conflict of interest.

**Bruijn, Joost de** .....3A: Kuros Biosciences BV; 4: Kuros Biosciences AG.

**Brunner, Florian**.....Disclosed no conflict of interest.

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

**Bruzzaniti, Angela**.....Disclosed no conflict of interest.

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

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

**Buchowski, Jacob** .....Disclosed no conflict of interest.

**Buckley, Conor**.....5: Integra.

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

**Bulun, Serdar E.** .....Disclosed no conflict of interest.

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

**Burdick, Jason A.**.....8: ACS Biomaterials Science and Engineering.

**Burdick, Jason A.** .....8: ACS Biomat. Sci. Eng.

**Burdis, Ross** .....Disclosed no conflict of interest.

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

**Burns, Jillian C**.....Disclosed no conflict of interest.

**Burr, David B**.....Disclosed no conflict of interest.

**Burris, David L.**.....Disclosed no conflict of interest.

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

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

**Busch, Megan E** .....Disclosed no conflict of interest.

**Bushan Raina, Deepak**.....4: Moroxite AB, Sweden.

**Bushan Raina, Deepak**.....4: Stockholder in Moroxite AB, Sweden.

**Bushan Raina, Deepak**.....4: DR holds stock in Moroxite AB, Sweden.

**Bylski-Austrow, Donita I**.....9: Scoliosis Research Society (SRS).

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

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

**Byrnes, Sara Kimberly** .....Disclosed no conflict of interest.

**Cahill, Sean** .....Disclosed no conflict of interest.

**Cai, Lei** .....Disclosed no conflict of interest.

**Caldwell, Jon-Michael** .....Disclosed no conflict of interest.

**Caliva, Francesco** .....Disclosed no conflict of interest.

**Call, Jarrod A** .....Disclosed no conflict of interest.

**Campfield, Brian D** .....Disclosed no conflict of interest.

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

**Caparaso, Sydney M** .....Disclosed no conflict of interest.

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

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

**Carbello, Camila** .....Disclosed no conflict of interest.

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

**Carli, Alberto V** .....3B: Heraeus, paid consultant.

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

**Carlson, Mitchell R** .....Disclosed no conflict of interest.

**Carney, Tara E** .....Disclosed no conflict of interest.

**Carozza, Mariel** .....Disclosed no conflict of interest.

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

**Carroll, Austin H** .....Disclosed no conflict of interest.

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

**Carvalho, Kepler** .....Disclosed no conflict of interest.

**Casella, Alena** .....Disclosed no conflict of interest.

**Castaneda, Chloe** .....Disclosed no conflict of interest.

**Castaneda, Macy** .....Disclosed no conflict of interest.

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

**Castillo Tafur, Julio** .....Disclosed no conflict of interest.

**Castillo, Francine** .....Disclosed no conflict of interest.

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

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

**Chachad, Ravi** .....Disclosed no conflict of interest.

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

**Chalberg, Thomas**.....4: Owns stock in Genascence.

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

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

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

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

**Chan, Julie**.....6: Misonix.

**Chandrasekaran, Prashant** .....*Disclosed no conflict of interest.*

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

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

**Chastain, Kalle** .....*Disclosed no conflict of interest.*

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

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

**Chen, Antonia** .....3B: bOne, Convatec, Avanos, Stryker, 3M, Heraeus, IrriMax, Pfizer, GLG, Ethicon, Guidepoint, PhagoMed; 4: Graftworx, Joint Purification Systems, Sonoran, IrriMax, Hyalex; 5: Sectra; 7B: SLACK Incorporated, UpToDate (reviewer); 8: Journal of Arthroplasty, Annals of Joint, Bone and Joint 360 Journal, Clinical Orthopaedics and Related Research, Journal of Bone and Joint Infection, Knee Surgery, Sports T, Journal of Orthopaedic Re; 9: AAOS, AJRR, AAHKS, European Knee Association),.

**Chen, Antonia** .....1: Stryker; 3B: Adaptive Phage Therapeutics, Avanos, BICMD, bOne, Convatec, Ethicon, GLG, Guidepoint, Heraeus, IrriMax, Pfizer, Stryker; 4: bOne, Graftworx, Hyalex, IrriMax, Joint Purification Systems, Sonoran; 7B: SLACK Incorporated, UpToDate (reviewer); 8: JBJS, JOA, CORR, JBJI, KSSTA; 9: AAHKS, AAOS, AJRR, EKA.

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

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

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

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

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

**Chen, Tony** .....3A: AGility Biomechanics Corp; 4: AGility Biomechanics Corp.

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

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

**Cheng, Kai-yuan**.....*Disclosed no conflict of interest.*

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

**Cheong, Sunghun**.....*Disclosed no conflict of interest.*

**Cherief, Masnsen**.....Disclosed no conflict of interest.

**Cherif, Hosni** .....Disclosed no conflict of interest.

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

**Chhay, Bonirath**.....Disclosed no conflict of interest.

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

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

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

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

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

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

**Chou, Siaw Meng**.....Disclosed no conflict of interest.

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

**Christ, Alexander** .....Disclosed no conflict of interest.

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

**Christiansen, Cory L**.....Disclosed no conflict of interest.

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

**Chun, Danielle S.**.....Disclosed no conflict of interest.

**Chung, Yik Lok** .....Disclosed no conflict of interest.

**Claeyssens, Frederik**.....Disclosed no conflict of interest.

**Clanton, Thomas**.....1: Arthrex, Inc: IP Royalties, Stryker: IP Royalties; 2: Arthrex, Inc: Paid presenter or speaker, Stryker: Paid presenter or speaker; 3B: Arthrex, Inc: Paid Consultant, Stryker: Paid Consultant; 3C: Wright Medical Technology, Inc: Unpaid Consultant; 5: Arthrex, Inc: Research Support, Smith and Nephew: Research Support.

**Clary, Chadd**.....5: DePuy Synthes.

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

**Clough, Nicholas** .....Disclosed no conflict of interest.

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

**Coffey, Lark L.** .....Disclosed no conflict of interest.

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

**Colasanti, Christopher**.....3B: Exactech, Inc.

**Colbrunn, Robb W** .....1: Cleveland Clinic, simVITRO.

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

**Colglazier, Kaitlyn A** .....Disclosed no conflict of interest.

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

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

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

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

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

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

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

**Conner, Taylor** .....Disclosed no conflict of interest.

**Conoscenti, Gioacchino** .....Disclosed no conflict of interest.

**Cook, Bryson** .....Disclosed no conflict of interest.

**Cook, James L** .....1: Arthrex, AthleteIQ, Musculoskeletal Transplant Foundation; 2: Arthrex; 3B: Artelon, Arthrex, CONMED Linvatec, Eli Lilly, Schwartz Biomedical, Trupanion, Bioventus; 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, Zimmer-Biomet, GE Healthcare; 7B: Thieme; 8: Journal of Knee Surgery; 9: Midwest Transplant Network, Musculoskeletal Transplant Foundation.

**Cook, Ralph** .....Disclosed no conflict of interest.

**Coombs, Dana** .....3A: DePuy Synthes.

**Cooper, Gwendolyn** .....Disclosed no conflict of interest.

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

**Corona, Benjamin T** .....Disclosed no conflict of interest.

**Costard, Lara S** .....Disclosed no conflict of interest.

**Couch, Brandon** .....Disclosed no conflict of interest.

**Cox, Lewis** .....Disclosed no conflict of interest.

**Crawford, Rebecca** .....Disclosed no conflict of interest.

**Crisco, Trey** .....Disclosed no conflict of interest.

**Crist, Brett D** .....1: globus Medical; 2: Kinetic Concepts, Inc.; 3B: Kinetic Concepts, Inc., Synthes; 4: Orthopaedic Implant Company, RomTech; 5: Synthes; 7B: Springer; 8: Journal of Hip Preservation, Journal of Orthopaedic Trauma, SLACK Incorporated; 9: AO Trauma North America, International Geriatric Fracture Society, Orthopaedic Trauma Association.

**Crist, Brett D** .....1: globus Medical; 2: Kinetic Concepts, Inc.; 3B: Kinetic Concepts, Inc., Synthes; 3C: Orthocentric; 4: Orthopaedic Implant Company, RomTech; 5: Synthes; 7B: Springer; 8: Journal of Hip Preservation, Journal of Orthopaedic Trauma, SLACK Incorporated; 9: AO Trauma North America, International Geriatric Fracture Society, Orthopaedic Trauma Association.

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

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

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

**Crowe, Lindsay** .....*Disclosed no conflict of interest.*

**Cruz Ayala, Jose A** .....*Disclosed no conflict of interest.*

**Currier, Barbara H** .....*Disclosed no conflict of interest.*

**Currier, John H** .....*Disclosed no conflict of interest.*

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

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

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

**D Bomgarden, Ryan** .....*Disclosed no conflict of interest.*

**D'Alessio, Jerry** .....3A: Stryker.

**Dadwal, Ushashi C** .....*Disclosed no conflict of interest.*

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

**Daher, Baraa** .....*Disclosed no conflict of interest.*

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

**Dalal, Sidhant S** .....*Disclosed no conflict of interest.*

**Dalloul, Christopher E** .....*Disclosed no conflict of interest.*

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

**Daneshvarhashjin, Nazanin**.....*Disclosed no conflict of interest.*

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

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

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

**Darabi, Amir** .....*Disclosed no conflict of interest.*

**Darevsky, David** .....*Disclosed no conflict of interest.*

**Darrieutort-Laffite, Christelle** ...Disclosed no conflict of interest.

**Darris, Kayla R** .....Disclosed no conflict of interest.

**Dasa, Vinod** .....Disclosed no conflict of interest.

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

**Davis-Wilson, Hope C** .....Disclosed no conflict of interest.

**Dayanidhi, Sudarshan** .....Disclosed no conflict of interest.

**De Bari, Cosimo** .....Disclosed no conflict of interest.

**de Cesar Netto, Cesar** .....1: Paragon28; 3B: CurveBeam, Nextremity, Ossio, Paragon28, Zimmer; 9: Weightbearing CT International Study Group.

**de Cesar Netto, Cesar** .....1: Paragon 28; 2: CurveBeam, Nextremity, Ossio, Paragon 28, Zimmer; 3B: CurveBeam, Nextremity, Ossio, Paragon 28, Zimmer; 4: CurveBeam; 8: Foot and Ankle Clinics; 9: Weightbearing CT International Study Group.

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

**De Massari, Daniele** .....3A: Stryker.

**de Mello, Fabio L** .....Disclosed no conflict of interest.

**Dearolf, Laurie** .....Disclosed no conflict of interest.

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

**DeCesari, Kayla** .....Disclosed no conflict of interest.

**DeFrate, Louis E** .....8: American Journal of Sports Medicine, Journal of Biomechanic, Journal of Orthopaedic Research.

**DeFrate, Louis E** .....8: American Journal of Sports Medicine, Journal of Biomechanics, Journal of Orthopaedic Research.

**DeFrate, Louis E** .....8: Editorial Board - Journal of Orthopaedic Research; Associate Editor - Journal of Biomechanics; Editorial Board - American Journal of Sports Medicine.

**DeFrate, Louis E.** .....8: Journal of Biomechanics, Journal of Orthopedic Research, American Journal of Sports Medicine.

**Delahoussaye, Abagail** .....Disclosed no conflict of interest.

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

**Demay, Marie B** .....Disclosed no conflict of interest.

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

**Denoeud, Cyprien** .....Disclosed no conflict of interest.

**DePalma, Samuel J** .....Disclosed no conflict of interest.

**Dervin, Geoffrey** .....3B: MicroPort Orthopedics; 5: MicroPort Orthopedics.

- Derwin, Kathleen**.....1: Viscus; 3B: Collamedix; 8: JBJS; 9: ORS.
- DeWall, Ryan** .....3A: DePuy Synthes.
- Dhand, Abhishek P.** .....*Disclosed no conflict of interest.*
- Diaz Payno, Pedro** .....*Disclosed no conflict of interest.*
- Diaz, Agustin** .....*Disclosed no conflict of interest.*
- Dibbern, Kevin** .....*Disclosed no conflict of interest.*
- Diedrich, Johanna** .....*Disclosed no conflict of interest.*
- Diekman, Brian O** .....*Disclosed no conflict of interest.*
- Dietz, Paula** .....*Disclosed no conflict of interest.*
- Dillon, Scott** .....*Disclosed no conflict of interest.*
- Dines, David** .....1: Biomet.
- Dines, Joshua** .....1: arthrex.
- Ding, Jing** .....*Disclosed no conflict of interest.*
- Ding, Xiang** .....*Disclosed no conflict of interest.*
- Ding, Xinchun** .....*Disclosed no conflict of interest.*
- Distler, Oliver** .....*Disclosed no conflict of interest.*
- Dixon, James E** .....3B: LocateBio; 5: LocateBio.
- Dobbins, Despina** .....3A: Peptilogics.
- Dobbs, Kathleen** .....*Disclosed no conflict of interest.*
- Dolan, Lori A** .....6: Green Sun Medical; 9: International Society on Scoliosis Orthopaedic and Rehabilitation Treatment (SOSORT).
- Dombrowski, Amanda** .....*Disclosed no conflict of interest.*
- Donaldson, William** .....*Disclosed no conflict of interest.*
- Dong, Neil** .....*Disclosed no conflict of interest.*
- Dorn, Jennifer** .....*Disclosed no conflict of interest.*
- Dornan, Grant J.** .....*Disclosed no conflict of interest.*
- Dosta Pons, Pere** .....*Disclosed no conflict of interest.*
- Doty, Stephen** .....*Disclosed no conflict of interest.*
- Doud, Emma** .....*Disclosed no conflict of interest.*
- Drain, Nicholas P** .....*Disclosed no conflict of interest.*

**Drazan, John F** .....Disclosed no conflict of interest.

**Drew, Jacob M** .....Disclosed no conflict of interest.

**Drissi, Hicham** .....Disclosed no conflict of interest.

**Duan, Xin** .....Disclosed no conflict of interest.

**Dubard, Philippe** .....3A: Blue-Ortho.

**Dudakovic, Amel** .....Disclosed no conflict of interest.

**Dudeck, Anne** .....Disclosed no conflict of interest.

**Dudli, Stefan** .....Disclosed no conflict of interest.

**Dunkley, Ian R** .....3A: Medtronic; 4: Medtronic.

**Dunning, Mark J** .....Disclosed no conflict of interest.

**Durst, Caleb** .....Disclosed no conflict of interest.

**Duryea, Jeffrey** .....Disclosed no conflict of interest.

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

**Dyment, Nathaniel** .....Disclosed no conflict of interest.

**Dyment, Nathaniel A** .....Disclosed no conflict of interest.

**Dziesinski, Lucas** .....Disclosed no conflict of interest.

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

**Easley, Jeremiah** .....Disclosed no conflict of interest.

**Ebata, Taku** .....Disclosed no conflict of interest.

**Ebaugh, Michael P** .....Disclosed no conflict of interest.

**Eberlin, Christopher T** .....Disclosed no conflict of interest.

**Eckels, Jason P** .....Disclosed no conflict of interest.

**Edwards, David** .....Disclosed no conflict of interest.

**Ehrhart, Nicole** .....3B: Onkos Surgical, Ripple Neuromed.

**Eisenbies, Zachary** .....Disclosed no conflict of interest.

**Eisner, Lainie E** .....Disclosed no conflict of interest.

**El Jordi, Omar** .....Disclosed no conflict of interest.

**El Touny, Ehab** .....Disclosed no conflict of interest.

**Elbarbary, Reyad** .....Disclosed no conflict of interest.

**Elemento, Olivier** .....Disclosed no conflict of interest.

**Elhabian, Shireen Y**.....Disclosed no conflict of interest.

**Elias, John J** .....Disclosed no conflict of interest.

**Eliasberg, Claire** .....Disclosed no conflict of interest.

**Ellermann, Jutta M** .....Disclosed no conflict of interest.

**Ellingsen Husebye, Elisabeth**....Disclosed no conflict of interest.

**Elliott, Dawn** .....Disclosed no conflict of interest.

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

**Elsaid, Khaled** .....Disclosed no conflict of interest.

**Elsayed, Abduallah G**.....Disclosed no conflict of interest.

**Elwell, Josie A** .....3A: Exactech, Inc.

**Ely, Erica**.....Disclosed no conflict of interest.

**Emerzian, Shannon R**.....Disclosed no conflict of interest.

**Endo, Makoto** .....Disclosed no conflict of interest.

**Engebretsen, Lars** .....3B: Arthrex; 4: iBalance; 5: Arthrex, Biomet, Smith and Nephew; 7A: Arthrex; 7B: BJSM; 8: Acta Orthopaedica, JBJS, KSSTA; 9: ESSKA, AOSSM, ISAKOS.

**Engellau, Jacob** .....Disclosed no conflict of interest.

**Englandier, Zoe A**.....Disclosed no conflict of interest.

**Englandier, Zoe A.** .....Disclosed no conflict of interest.

**Entezari, Vahid**.....3B: DJO; 5: DJO.

**Erdemir, Ahmet** .....Disclosed no conflict of interest.

**Erickson, Bradley** .....Disclosed no conflict of interest.

**Ersland, Erik** .....Disclosed no conflict of interest.

**Eskandari, Amir Hossein**.....Disclosed no conflict of interest.

**Eskelinen, Atte S**.....Disclosed no conflict of interest.

**Esparza, Mary C** .....Disclosed no conflict of interest.

**Espinoza Orrias, Alejandro A**.....Disclosed no conflict of interest.

**Esposito, John G** .....Disclosed no conflict of interest.

**Evans, Christopher**.....1: 4, own stock in Genascence Inc.

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

**Eveld, Maura E**.....Disclosed no conflict of interest.

**Fahey, Megan J** .....Disclosed no conflict of interest.

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

**Fairwood, Tyler** .....3A: Medline.

**Faith, Hayden** .....Disclosed no conflict of interest.

**Fallavollita, Pascal** .....Disclosed no conflict of interest.

**Fan, Catherine** .....Disclosed no conflict of interest.

**Fan, Wen** .....3A: Exactech.

**Fang, Fei** .....Disclosed no conflict of interest.

**Farrell, Easton** .....Disclosed no conflict of interest.

**Farrow, Emily** .....Disclosed no conflict of interest.

**Farrow, Lutul** .....5: OREF; 8: AJSM, VJSM.

**Farrow, Lutul D** .....Disclosed no conflict of interest.

**Farshad-Amacker, Nadja** .....Disclosed no conflict of interest.

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

**Feeley, Brian** .....4: Bioniks, Kaliber; 5: Stryker; 8: JSES, CRMSM.

**Feeley, Brian T** .....Disclosed no conflict of interest.

**Felton, Olivia** .....Disclosed no conflict of interest.

**Fenstad, Anne Marie** .....Disclosed no conflict of interest.

**Fercher, David** .....Disclosed no conflict of interest.

**Ferguson, Ellie** .....Disclosed no conflict of interest.

**Fielding, Claire** .....Disclosed no conflict of interest.

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

**Fields, Aaron J** .....Disclosed no conflict of interest.

**Fink, Diane** .....Disclosed no conflict of interest.

**Finnila, Mikko** .....Disclosed no conflict of interest.

**Fisch, Kathleen M** .....Disclosed no conflict of interest.

**Fischer, Verena** .....Disclosed no conflict of interest.

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

**Fithian, Donald C** .....Disclosed no conflict of interest.

**Flood, Paris** .....Disclosed no conflict of interest.

**Florea, Alexandru** .....Disclosed no conflict of interest.

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

**Foody, Jacqueline N** .....Disclosed no conflict of interest.

**Fossum, Brad** .....Disclosed no conflict of interest.

**Foucher, Kharma** .....Disclosed no conflict of interest.

**Frankle, Mark** .....1: DJO Surgical; 2: DJO Surgical; 3B: DJO Surgical; 5: DJO Surgical; 7A: DJO Surgical; 9: ASES.

**Freedman, Benjamin R** .....Disclosed no conflict of interest.

**Freeman, Fiona** .....Disclosed no conflict of interest.

**Freeman, Fiona E** .....Disclosed no conflict of interest.

**Fritz, Bryan** .....3A: DePuy Synthes.

**Frondelius, Tuomas** .....Disclosed no conflict of interest.

**Fu, Chengcheng** .....Disclosed no conflict of interest.

**Fu, Freddie** .....8: AJSM, KSSTA; 9: ISAKOS.

**Fu, Freddie H** .....Disclosed no conflict of interest.

**Fujimoto, Tara** .....Disclosed no conflict of interest.

**Fujino, Keitaro** .....Disclosed no conflict of interest.

**Fujiwara, Toshifumi** .....Disclosed no conflict of interest.

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

**Fung, Ashley K** .....Disclosed no conflict of interest.

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

**Funk, Grahmm A** .....Disclosed no conflict of interest.

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

**Furukawa, Takahiro** .....Disclosed no conflict of interest.

**Gabrielli, Alexandra** .....Disclosed no conflict of interest.

**Gacaferi, Hamez** .....Disclosed no conflict of interest.

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

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

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

**Gagnon, Denis** .....Disclosed no conflict of interest.

**Galanter, Eytan**.....Disclosed no conflict of interest.

**Galarraga, Jonathan** .....Disclosed no conflict of interest.

**Galarraga, Jonathan H** .....Disclosed no conflict of interest.

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

**Gandhi, Roshni** .....Disclosed no conflict of interest.

**Gao, Kenneth T** .....Disclosed no conflict of interest.

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

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

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

**Garcia, Carolina** .....Disclosed no conflict of interest.

**Garcia, Steven**.....Disclosed no conflict of interest.

**Garcia-Garcia, Andres** .....Disclosed no conflict of interest.

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

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

**Gatterer, Mary C** .....Disclosed no conflict of interest.

**Ge, Jonathan**.....Disclosed no conflict of interest.

**Gebhard, Florian**.....Disclosed no conflict of interest.

**Gehret, Paul M.** .....Disclosed no conflict of interest.

**Gempfer, Carina** .....Disclosed no conflict of interest.

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

**Ghezelbash, Farshid** .....Disclosed no conflict of interest.

**Ghivizzani, Steven** .....4: Owns stock in Genascence Ins.

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

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

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

**Gilbert, Jeremy L**.....1: Royalties received from Syracuse University; 3B: Paid Consultant: Owner, Syracuse Bio-Materials Company, Zimmer Biomet, Smith and Nephew, Stryker Orthopedics, Bausch and Lomb; 5: Research/Institutional Support: Clemson University receives research support from DePuy Synthes and Bayer, Inc.; 7B: Honorarium from J Wiley and Sons; 8: Editor-in-Chief, Journal of Biomedical Materials Research – Part B; 9: Member, Council of the Society For Biomaterials.

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

**Gillespie, Callan M**.....1: Cleveland Clinic, simVITRO.

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

**Gira, Emma** .....Disclosed no conflict of interest.

**Glaeser, Julianne** .....Disclosed no conflict of interest.

**Glasser, Morgan** .....Disclosed no conflict of interest.

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

**Gobbato, Bruno** .....3B: Exactech, Inc.

**Godin, Jonathan** .....1: Arthrex.

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

**Gokani, Vishal** .....Disclosed no conflict of interest.

**Gokul, Deeptha**.....Disclosed no conflict of interest.

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

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

**Goldman, Sam** .....Disclosed no conflict of interest.

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

**Goldring, Steven** .....4: Steven is cofounder of Ensign Pharmaceutical.

**Gomez Alvarado, Francisco**.....Disclosed no conflict of interest.

**Gomez, Francisco**.....Disclosed no conflict of interest.

**Gomez-Salazar, Mario** .....Disclosed no conflict of interest.

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

**Gonzalez-Vazquez, Arlyng**.....Disclosed no conflict of interest.

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

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

**Gormley, Conor** .....Disclosed no conflict of interest.

**Goto, Hideyuki**.....Disclosed no conflict of interest.

**Gottardi, Riccardo** .....Disclosed no conflict of interest.

**Grad, Sibylle**.....Disclosed no conflict of interest.

**Granade, Charles M**.....Disclosed no conflict of interest.

**Greaser, Michael C** .....Disclosed no conflict of interest.

**Green, Nicola H**.....Disclosed no conflict of interest.

**Green, Samuel** .....Disclosed no conflict of interest.

**Greenacre, Cheryl B**.....Disclosed no conflict of interest.

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

**Greenfield, Ed** .....Disclosed no conflict of interest.

**Greising, Sarah**.....5: SMG is a Sub-Award PI on DoD FUNded SBIR to the Fibraling Corp; 8: Associate Editor for Connective Tissue Research.

**Greising, Sarah M** .....8: Associate Editor for Connective Tissue Research.

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

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

**Griffin, Lisa**.....Disclosed no conflict of interest.

**Griffin, Tim**.....8: Receives payment as an Associate Editor of the Journal Osteoarthritis and Cartilage.

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

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

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

**Gui, Tao**.....Disclosed no conflict of interest.

**Guidetti, Martina**.....Disclosed no conflict of interest.

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

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

**Guilak, Farshid** .....Disclosed no conflict of interest.

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

**Guler, Selcan**.....Disclosed no conflict of interest.

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

**Gulotta, Lawrence** .....1: Exactech,Inc.

**Gultian, Kirstene**.....Disclosed no conflict of interest.

**Gunda, Bhavana** .....Disclosed no conflict of interest.

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

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

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

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

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

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

**Gustav, Marco** .....Disclosed no conflict of interest.

**Guthrie, Timothy** .....Disclosed no conflict of interest.

**Habibi, Yasamin** .....Disclosed no conflict of interest.

**Haffner-Luntzer, Melanie**.....Disclosed no conflict of interest.

**Haffner-Luntzer, Melanie**.....8: JOR, Frontiers; 9: ORS ISFR, ECTS.

**Hageman, Kara A** .....Disclosed no conflict of interest.

**Haghighatnejad, Mehrnoush** ....Disclosed no conflict of interest.

**Haglund, Lisbet** .....Disclosed no conflict of interest.

**Hahn, Alyssa K.** .....Disclosed no conflict of interest.

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

**Haller, Justin** .....3B: NewClip Technics, Osteocentric, Stryker.

**Halvorson, Ryan T** .....Disclosed no conflict of interest.

**Hamada, Moustafa A** .....Disclosed no conflict of interest.

**Hamasaki, Masanari** .....Disclosed no conflict of interest.

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

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

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

**Han, Woojin M.** .....Disclosed no conflict of interest.

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

**Hann, Alice J** .....Disclosed no conflict of interest.

**Hansen, Victoria** .....Disclosed no conflict of interest.

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

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

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

**Harding, Amy T** .....Disclosed no conflict of interest.

**Hardwick-Morris, Max** .....3A: 360 Med Care.

**Harrington, Matthew J** .....Disclosed no conflict of interest.

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

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

**Hasegawa, Masahiro** .....Disclosed no conflict of interest.

**Hassan, Mahad** ..... *Disclosed no conflict of interest.*

**Hauck, Stefanie** ..... *Disclosed no conflict of interest.*

**Haudenschild, Anne K** ..... *Disclosed no conflict of interest.*

**Haudenschild, Dominik R.** ..... 4: Tesio Pharmaceutical.

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

**Havlioglu, Necat** ..... *Disclosed no conflict of interest.*

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

**Haytmanek Jr., Thomas** ..... 2: Arthrex, Inc: Paid presenter or speaker.

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

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

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

**Heckmann, Nathanael** ..... 3B: Intellijoint Surgical, MicroPort Orthopaedics; 4: Intellijoint Surgical; 9: AAOS, AJRR.

**Hedge, Vishal** ..... *Disclosed no conflict of interest.*

**Heebner, Nick** ..... *Disclosed no conflict of interest.*

**Heggli, Irina** ..... *Disclosed no conflict of interest.*

**Heidenreich, Elizabeth** ..... *Disclosed no conflict of interest.*

**Heldreth, Mark A.** ..... 3A: DePuy Synthes; 4: Johnson and Johnson.

**Herger, Nick** ..... *Disclosed no conflict of interest.*

**Hermus, Joris P** ..... 9: European Foot and Ankle Society.

**Herrera, Lizeth** ..... 3A: Stryker; 4: Stryker.

**Hershey, Maxwell** ..... *Disclosed no conflict of interest.*

**Hertrich, Lisa** ..... *Disclosed no conflict of interest.*

**Herzog, Walter** ..... *Disclosed no conflict of interest.*

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

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

**Higgins, Thomas** ..... *Disclosed no conflict of interest.*

**Hiraki, Harrison L** ..... *Disclosed no conflict of interest.*

**Hirata, Hirohito** ..... *Disclosed no conflict of interest.*

**Hirose, Takeshi** ..... *Disclosed no conflict of interest.*

**Hiroyuki, Tachi**.....Disclosed no conflict of interest.

**Hishimura, Ryosuke**.....Disclosed no conflict of interest.

**Hixon, Katie R**.....Disclosed no conflict of interest.

**Ho, Jason**.....2: DJO; 5: Zimmer Biomet; 6: Liberty Surgical.

**Hobein, Alexander**.....Disclosed no conflict of interest.

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

**Hoey, David**.....Disclosed no conflict of interest.

**Hoffman, Daniel B**.....Disclosed no conflict of interest.

**Hogan, MaCalus**.....8: AAOS, AOFAS, BOS.

**Holder, Jana**.....Disclosed no conflict of interest.

**Holguin, Nilsson**.....Disclosed no conflict of interest.

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

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

**Hopster, Klaus**.....Disclosed no conflict of interest.

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

**Houske, Eden**.....Disclosed no conflict of interest.

**Hove, Roy**.....Disclosed no conflict of interest.

**Howe, Danielle**.....Disclosed no conflict of interest.

**Howe, Tet Sen**.....Disclosed no conflict of interest.

**Hsu, Erin**.....Disclosed no conflict of interest.

**Hsu, Wellington**.....Disclosed no conflict of interest.

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

**Hu, Yajing**.....Disclosed no conflict of interest.

**Huang, Alice**.....Disclosed no conflict of interest.

**Huang, Dave**.....Disclosed no conflict of interest.

**Huang, David Huang B**.....3A: Peptilogics.

**Huang, Elijah Ejun**.....Disclosed no conflict of interest.

**Huang, Muyin**.....Disclosed no conflict of interest.

**Huang, Yuming**.....Disclosed no conflict of interest.

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

**Huard, Johnny**.....1: Cook Myosite; 9: Orthopaedic Research Society.

**Huard, Johnny**.....1: Cook Myosite Inc.; 9: Orthopaedic Research Society.

**Huddleston, James** .....3B: Exactech; 7A: Exactech.

**Huebsch, Nathaniel** .....*Disclosed no conflict of interest.*

**Hughes, Jonathan** .....*Disclosed no conflict of interest.*

**Hunda, Edward T** .....*Disclosed no conflict of interest.*

**Hunt, Emily** .....*Disclosed no conflict of interest.*

**Hurschler, Christof**.....*Disclosed no conflict of interest.*

**Hussein, Nazar** .....*Disclosed no conflict of interest.*

**Hux, Nicholas** .....*Disclosed no conflict of interest.*

**Hyakumachi, Takahiko** .....*Disclosed no conflict of interest.*

**Hyre, Nathan** .....*Disclosed no conflict of interest.*

**Iannotti, Joseph** .....1: Viscus, Depuy, Arthrex, Tornier, DJO, Wright Medical; 3B: Collamedix, DJO, Medical Device Business Services, Wright Medical; 4: Custom Orthopaedic Solutions; 7B: Wolters Kluwer Health.

**Iannucci, Leanne E** .....*Disclosed no conflict of interest.*

**Iatridis, James C** .....*Disclosed no conflict of interest.*

**Igseder, Bernhard** .....*Disclosed no conflict of interest.*

**Ignatius, Anita** .....*Disclosed no conflict of interest.*

**Iida, Keiichiro** .....*Disclosed no conflict of interest.*

**Illien-Junger, Svenja** .....*Disclosed no conflict of interest.*

**Imagama, Shiro** .....*Disclosed no conflict of interest.*

**Imhauser, Carl** .....*Disclosed no conflict of interest.*

**Imrey, Peter** .....3B: GE Healthcare; 8: JASN.

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

**Indiana, Dhiraj** .....*Disclosed no conflict of interest.*

**Innocenti, Bernardo** .....*Disclosed no conflict of interest.*

**Inoue, Jumpei** .....*Disclosed no conflict of interest.*

**Inoue, Nozomu** .....*Disclosed no conflict of interest.*

**Inui, Atsuyuki**.....*Disclosed no conflict of interest.*

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

**Irie, Tohru** .....Disclosed no conflict of interest.

**Irie, Tomoyo** .....Disclosed no conflict of interest.

**Iriondo, Claudia** .....Disclosed no conflict of interest.

**Irisk, Debra** .....Disclosed no conflict of interest.

**Irwin, Mavis** .....Disclosed no conflict of interest.

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

**Isales, Carlos M** .....Disclosed no conflict of interest.

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

**Ishikawa, Yoko** .....Disclosed no conflict of interest.

**Ismaily, Sabir K** .....Disclosed no conflict of interest.

**Ivashkiv, Lionel** .....Disclosed no conflict of interest.

**Ivashkiv, Lionel B** .....3C: Eli Lilly and Company.

**Ivashkiv, Lionel B** .....3C: Eli Lilly, unpaid consultant.

**Iwasaki, Koji** .....Disclosed no conflict of interest.

**Iwasaki, Koji** .....5: Olympus Terumo Biomaterials Corp.

**Iwasaki, Norimasa** .....Disclosed no conflict of interest.

**Iwata, Akira** .....Disclosed no conflict of interest.

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

**Jacobs, Cale** .....5: Flexion Therapeutics, Smith & Nephew; 8: VJSM.

**Jacobsen, Timothy** .....Disclosed no conflict of interest.

**Jagtap, Jaidip** .....Disclosed no conflict of interest.

**Jahandar, Amirhossein** .....Disclosed no conflict of interest.

**Jain, Era** .....Disclosed no conflict of interest.

**Jakubowitz, Eike** .....Disclosed no conflict of interest.

**James, Aaron** .....3B: Lifesprout LLC, Novadip LLC; 8: Bone Research, American Journal of Pathology.

**James, Aaron W** .....1: Novadip Biosciences, Lifesprout LLC.

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

**Jancuska, Jeffrey M** .....Disclosed no conflict of interest.

**Janssen, Dennis** .....Disclosed no conflict of interest.

**Jay, Gregory** .....4: Equity stake in Lubris LLC.

**Jeffers, Jonathan R.T.** .....Disclosed no conflict of interest.

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

**Jeong, Sophia** .....Disclosed no conflict of interest.

**Jevsevar, Kori C.** .....Disclosed no conflict of interest.

**Ji, Ping** .....Disclosed no conflict of interest.

**Jia, Zhenshan** .....Disclosed no conflict of interest.

**Jiang, Wensen** .....4: Moderna, Johnson & Johnson, Bluebird Bio.

**Jiang, Xi** .....Disclosed no conflict of interest.

**Jiang, Yucan** .....Disclosed no conflict of interest.

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

**Jin, Yuxuan** .....Disclosed no conflict of interest.

**Jo, Woo-Lam** .....Disclosed no conflict of interest.

**Joeng, Kyu-Sang** .....Disclosed no conflict of interest.

**Johannesdottir, Fjola** .....Disclosed no conflict of interest.

**Johnson, Casey P.** .....Disclosed no conflict of interest.

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

**Johnson, Darren** .....3B: Smith & Nephew; 5: Smith & Nephew; 7A: Smith & Nephew; 7B: Elsevier; 8: SLACK, Orthopedics, Orthopedics Today, J Surg Orthop Advances, Sports Medicine & Arthroscopy Review; 9: AOSSM, SOA.

**Johnson, Denae** .....Disclosed no conflict of interest.

**Johnson, Gemma** .....Disclosed no conflict of interest.

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

**Johnson, Tony** .....Disclosed no conflict of interest.

**Johnston, Jeffrey** .....Disclosed no conflict of interest.

**Johnston, Nancy A.** .....Disclosed no conflict of interest.

**Johnston, Shira** .....Disclosed no conflict of interest.

**Johnston, Shira N.** .....Disclosed no conflict of interest.

**Jones, Dakota** .....Disclosed no conflict of interest.

**Jones, Gareth** .....Disclosed no conflict of interest.

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

**Joukar, Amin** .....Disclosed no conflict of interest.

**Jun, Bong-Jae** .....1: Viscus.

**June, Ron** .....Disclosed no conflict of interest.

**Junginger, Lucas** .....Disclosed no conflict of interest.

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

**Kacena, Melissa A.** .....Disclosed no conflict of interest.

**Kacker, Kunaal** .....Disclosed no conflict of interest.

**Kadirkamanathan, Visakan** .....Disclosed no conflict of interest.

**Kahle, Elizabeth R.** .....Disclosed no conflict of interest.

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

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

**Kajabi, Abdul Wahed** .....Disclosed no conflict of interest.

**Kaji, Deepak** .....Disclosed no conflict of interest.

**Kalbitz, Miriam** .....Disclosed no conflict of interest.

**Kalluri, Anita** .....Disclosed no conflict of interest.

**Kamal, Fadia** .....Disclosed no conflict of interest.

**Kamal, Robin** .....Disclosed no conflict of interest.

**Kamalitdinov, Timur B.** .....Disclosed no conflict of interest.

**Kamathewatta, Nilan JB** .....Disclosed no conflict of interest.

**Kambrath, Anuradha V** .....Disclosed no conflict of interest.

**Kanahori, Masaya** .....Disclosed no conflict of interest.

**Kanai, Satoshi** .....Disclosed no conflict of interest.

**Kane, Gillian** .....Disclosed no conflict of interest.

**Kaneda, Giselle** .....Disclosed no conflict of interest.

**Kang, Ho Won** .....Disclosed no conflict of interest.

**Kanim, Linda** .....4: Abbott, Moderna, Medtronic.

**Kanjiya, Shrey** .....Disclosed no conflict of interest.

**Kanto, Ryo** .....Disclosed no conflict of interest.

**Karner, Courtney M.** .....Disclosed no conflict of interest.

**Karnik, Sonali** .....Disclosed no conflict of interest.

**Karunaseelan, Kabelan J** .....Disclosed no conflict of interest.

**Karuppa Gounder, Vengadeshprabhu** Disclosed no conflict of interest.

**Katarincic, Julia A** .....Disclosed no conflict of interest.

**Katarincic, Julie** .....Disclosed no conflict of interest.

**Kate Evans, Mary** .....Disclosed no conflict of interest.

**Kato, Koji** .....Disclosed no conflict of interest.

**Kato, Tatsuo** .....Disclosed no conflict of interest.

**Katz, Dakota B.** .....Disclosed no conflict of interest.

**Kaufman, Kenton R** .....Disclosed no conflict of interest.

**Kauppinen, Sami** .....Disclosed no conflict of interest.

**Kaur, Asees** .....Disclosed no conflict of interest.

**Kawakami, Kensaku** .....Disclosed no conflict of interest.

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

**Keeney, James A** .....3B: 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.

**Keith Lang, Sinaia** .....Disclosed no conflict of interest.

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

**Kelly, Daniel** .....5: Johnson & Johnson.

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

**Kelly, Domhnall C** .....Disclosed no conflict of interest.

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

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

**Kent, Robert N** .....Disclosed no conflict of interest.

**Keravala, Annahita** .....1: 4, Owns stock in Genascence.

**Kernkamp, Willem Alexander Alexander** Disclosed no conflict of interest.

**Khandha, Ashutosh** .....Disclosed no conflict of interest.

**Kharlamov, Alexander** .....Disclosed no conflict of interest.

**Khatib, Nidal S** .....Disclosed no conflict of interest.

**Khattab, Karim** .....Disclosed no conflict of interest.

- Kheir, Nadim** .....Disclosed no conflict of interest.
- Kiapour, Ata** .....3B: MIACH Orthopaedics; 8: BMC Musculoskeletal Disorders, American Journal of Sports Medicine.
- Kiapour, Ata M** .....3B: MIACH Orthopaedics; 8: BMC Musculoskeletal Disorders, American Journal of Sports Medicine.
- Kida, Hiroaki** .....Disclosed no conflict of interest.
- Killaars, Anouk** .....Disclosed no conflict of interest.
- Killian, Megan L** .....Disclosed no conflict of interest.
- Killian, Megan L.** .....9: ORS WLF member.
- Kim, Dae-Yoo** .....Disclosed no conflict of interest.
- Kim, Harry** .....Disclosed no conflict of interest.
- Kim, Hubert** .....Disclosed no conflict of interest.
- Kim, Minwook** .....Disclosed no conflict of interest.
- Kim, Sung Yeon** .....Disclosed no conflict of interest.
- Kim, Tae Won B.** .....Disclosed no conflict of interest.
- Kim, Young Jo** .....Disclosed no conflict of interest.
- Kim, Young-Jo** .....Disclosed no conflict of interest.
- Kimia, Amir** .....Disclosed no conflict of interest.
- Kimura, Atsushi** .....Disclosed no conflict of interest.
- Kim-Wang, Sophia Y** .....Disclosed no conflict of interest.
- King, Shane T** .....Disclosed no conflict of interest.
- Kittaka, Mizuho** .....Disclosed no conflict of interest.
- Klatt, Brian** .....2: Smith and Nephew, Stryker; 3B: Smith and Nephew, Stryker, Zimmer; 7A: Smith and Nephew, Stryker, Zimmer, Depuy; 7B: SLACK Inc, Elsevier.
- Klatt, Brian** .....2: Smith and Nephew, Stryker; 3B: Smith and Nephew, Stryker, Zimmer; 7A: Smith and Nephew, Stryker, Zimmer, Depuy; 7B: SLACK Incorporated and Elsevier.
- Klemsz, Michael J.** .....Disclosed no conflict of interest.
- Klemt, Christian** .....Disclosed no conflict of interest.
- Kleweno, Conor** .....Disclosed no conflict of interest.
- Kloser, Heidi** .....Disclosed no conflict of interest.
- Knights, Alexander** .....Disclosed no conflict of interest.
- Knudson, Cheryl** .....Disclosed no conflict of interest.

**Knudson, Warren** .....Disclosed no conflict of interest.

**Knutson, Cassidy** .....Disclosed no conflict of interest.

**Ko, Jiawei Kevin** .....3B: Exactech, Inc.

**Koch, Kevin M** .....5: GE Healthcare.

**Koch, Kevin M** .....1: GE Healthcare; 5: GE Healthcare, Siemens Healthcare.

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

**Koff, Matthew F** .....5: GE Healthcare.

**Koh, Esther** .....Disclosed no conflict of interest.

**Koh, Joyce Suang Bee** .....Disclosed no conflict of interest.

**Kojima, Toshihisa** .....Disclosed no conflict of interest.

**Kokabu, Terufumi** .....Disclosed no conflict of interest.

**Kolin, David** .....Disclosed no conflict of interest.

**Komaravolu, Ravi** .....Disclosed no conflict of interest.

**Komistek, Richard D.** .....1: DePuy Synthes; 3B: DePuy Synthes.

**Kondo, Eiji** .....Disclosed no conflict of interest.

**Konnaris, Maxwell** .....Disclosed no conflict of interest.

**Kontaxis, Andreas** .....Disclosed no conflict of interest.

**Koo, Seungbum** .....Disclosed no conflict of interest.

**Korcari, Antonion** .....Disclosed no conflict of interest.

**Korhonen, Rami K** .....Disclosed no conflict of interest.

**Korn, Claudia** .....Disclosed no conflict of interest.

**Kosinski, Andrzej S.** .....Disclosed no conflict of interest.

**Kosinski, Lindsay R** .....Disclosed no conflict of interest.

**Kosnik, Sabrina E** .....Disclosed no conflict of interest.

**Kosonen, Joonas P** .....Disclosed no conflict of interest.

**Kowalski, Erik** .....Disclosed no conflict of interest.

**Koyama, Eiki** .....Disclosed no conflict of interest.

**Koyoma, Eiki** .....Disclosed no conflict of interest.

**Krähenbühl, Nicola** .....Disclosed no conflict of interest.

**Krater, Timothy** .....Disclosed no conflict of interest.

**Kratzer, Avery L** .....Disclosed no conflict of interest.

**Krekeler, Gwendalyn** .....Disclosed no conflict of interest.

**Kreviazuk, Cheryl** .....Disclosed no conflict of interest.

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

**Kroupa, Kimberly R** .....Disclosed no conflict of interest.

**Krug, Roland** .....Disclosed no conflict of interest.

**Kucharik, Michael P** .....Disclosed no conflict of interest.

**Kukushliev, Vasil V** .....Disclosed no conflict of interest.

**Kulm, Scott** .....Disclosed no conflict of interest.

**Kulzhanova, Gulzada** .....Disclosed no conflict of interest.

**Kumar, Sumar** .....Disclosed no conflict of interest.

**Kumar, Vikas** .....3A: KenSci, Inc.

**Kuntz, Andrew F** .....5: Integra Lifesciences, Orthofix, Inc., FX Shoulder; 9: Orthopaedic Research Society, Phoenix Shoulder Society, American Shoulder and Elbow Surgeons, American Board of Orthopaedic Surgery.

**Kuo, Catherine K** .....Disclosed no conflict of interest.

**Kupratis, Meghan** .....Disclosed no conflict of interest.

**Kuroda, Ryosuke** .....Disclosed no conflict of interest.

**Kuroiwa, Tomoyuki** .....Disclosed no conflict of interest.

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

**Kushioka, Junichi** .....Disclosed no conflict of interest.

**Kuttler, Andreas** .....5: Novartis.

**Kutzarov, Kamen** .....Disclosed no conflict of interest.

**Kuyl, Emile-Victor** .....Disclosed no conflict of interest.

**Kwoh, C. Kent** .....Disclosed no conflict of interest.

**kwon, hyuk-kwon** .....Disclosed no conflict of interest.

**Kwon, So Hyeon** .....Disclosed no conflict of interest.

**Kwon, Soon-Yong** .....Disclosed no conflict of interest.

**Kwon, Young-Min** .....Disclosed no conflict of interest.

**La Carrubba, Vincenzo** .....Disclosed no conflict of interest.

**La Fontaine, Javier** .....Disclosed no conflict of interest.

**Labaze, Dukens** .....Disclosed no conflict of interest.

**Lachmann, Alexander** .....Disclosed no conflict of interest.

**Ladd, Amy** .....Disclosed no conflict of interest.

**Lake, Spencer** .....Disclosed no conflict of interest.

**Lake, Spencer P** .....Disclosed no conflict of interest.

**Lalevee, Matthieu** .....Disclosed no conflict of interest.

**Lalone, Emily** .....Disclosed no conflict of interest.

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

**Lammlin, Lindsey** .....Disclosed no conflict of interest.

**Lamontagne, Mario** .....5: MicroPort Orthopedics.

**Lane, John G** .....Disclosed no conflict of interest.

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

**Langthaler, Patrick** .....Disclosed no conflict of interest.

**Lanschaft, Assaf** .....Disclosed no conflict of interest.

**Lansdown, Drew** .....3B: Vericel; 5: Anthrex, Evolution Surgical; 9: Arthroscopy Association of North America, American Orthopaedic Society for Sports Medicine.

**Lanting, Brent** .....1: DePuy, IdealFit Spacer Solutions, IntelliJoint, Smith & Nephew, Stryker, Zimmer.

**Lanzetta, Nicholas** .....Disclosed no conflict of interest.

**Larivière, Christian** .....Disclosed no conflict of interest.

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

**Larochette, Nathanael** .....Disclosed no conflict of interest.

**Larson, Jill** .....Disclosed no conflict of interest.

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

**Latimer, July** .....Disclosed no conflict of interest.

**Lattanza, Lisa** .....2: Acumed; 3B: Acumed.

**Lattermann, Christian** .....3B: Samumed, Vericel, Joint Restoration Foundation; 8: Cartilage, J Sports Physiology, The Knee, OJSM; 9: Biologic Association, ICRS.

**Lattermann, Christian** .....3B: Vericel; 8: CartilageJ, Sports Physiology, The Knee, Orthopaedic Journal of Sports Medicine, (Biologic Association; 9: International Cartilage Repair Society, Joint Restoration Foundation.

**Lau, Yian Khai** .....Disclosed no conflict of interest.

**Laux, Christoph**.....Disclosed no conflict of interest.

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

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

**Lazar, Ann A**.....Disclosed no conflict of interest.

**Le Maitre, Christine L** .....1: Flexion Therapeutics; 3B: Flexion Therapeutics; 5: Flexion Therapeutics; 7A: Flexion Therapeutics; 8: JOR Spine, Scientific Reports; 9: ORS Spine section, SBPR.

**Leach, Kent** .....8: I am Editor-in-Chief of the Journal of Biomedical Materials Research Part A.

**Leary, Emily V** .....7B: BMJ Journals; 8: BMJ Journals, Thieme.

**Lee, Dong Yeon**.....Disclosed no conflict of interest.

**Lee, Dong-Oh**.....Disclosed no conflict of interest.

**Lee, Erin CS**.....Disclosed no conflict of interest.

**Lee, Fei San**.....Disclosed no conflict of interest.

**Lee, Francis**.....Disclosed no conflict of interest.

**Lee, Hongpyo**.....Disclosed no conflict of interest.

**Lee, Hwaran**.....Disclosed no conflict of interest.

**Lee, Joon**.....Disclosed no conflict of interest.

**Lee, Seunghwan**.....Disclosed no conflict of interest.

**Lee, Wonsae**.....Disclosed no conflict of interest.

**Lee, Yeonju**.....Disclosed no conflict of interest.

**Leek, Connor**.....Disclosed no conflict of interest.

**Leggin, Justin**.....Disclosed no conflict of interest.

**Lehner, Christine**.....Disclosed no conflict of interest.

**Lehoczky, Jessica**.....Disclosed no conflict of interest.

**Lemmon, Elisabeth A**.....Disclosed no conflict of interest.

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

**Lenz, Amy**.....Disclosed no conflict of interest.

**Lenz, Amy L.**.....Disclosed no conflict of interest.

**Lenz, Kristin**.....Disclosed no conflict of interest.

**Lenz, Kristin L.**.....Disclosed no conflict of interest.

**Lerch, Till**.....Disclosed no conflict of interest.

**Lerch, Till D** .....Disclosed no conflict of interest.

**Leung, Shui Yee**.....Disclosed no conflict of interest.

**LeVasseur, Clarissa** .....Disclosed no conflict of interest.

**Levato, Riccardo** .....Disclosed no conflict of interest.

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

**Levine, William N.** .....Disclosed no conflict of interest.

**Lewis, Brian D** .....4: Paid Consultant: Stryker, Zimmer, Nanovis.

**Lewis, Karl**.....Disclosed no conflict of interest.

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

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

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

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

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

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

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

**Li, Neill Y** .....Disclosed no conflict of interest.

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

**Li, Xiaojuan** .....5: Siemens.

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

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

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

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

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

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

**Li, Zhong (Alan)**.....Disclosed no conflict of interest.

**Li, Zong-Ming** .....Disclosed no conflict of interest.

**Liang, Dawei** .....Disclosed no conflict of interest.

**Lidgren, Lars**.....4: Stockholder in Moroxite AB, Sweden; 8: . Lars Lidgren is a board member of Bone Support AB, Sweden and Ortho Cell, Australia.

**Lidgren, Lars**.....4: Moroxite AB, Sweden; 9: Bone support AB, Sweden and OrthoCell Ltd., Australia.

**Lieber, Richard L** .....Disclosed no conflict of interest.

**Lieber, Richard L** .....Disclosed no conflict of interest.

**Lieberman, Jay** .....3B: DePuy, a Johnson & Johnson Company; 4: Hip Innovation Technology, BD Surgiphor; 7B: Saunders/Mosby-Elsevier; 9: AAOS, Western Orthopaedic Association, Hip Society, Musculoskeletal Transplant foundation.

**Liedert, Astrid** .....Disclosed no conflict of interest.

**Lillquist, Thomas J** .....Disclosed no conflict of interest.

**Lim, Youngwook** .....Disclosed no conflict of interest.

**Limberg, Afton** .....Disclosed no conflict of interest.

**Lin, Albert** .....3B: Wright, Arthrex.

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

**Lin, Mei Yun** .....3A: Avantor, Inc.

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

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

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

**Lind, Martin** .....5: Smith and Nephew.

**Linton, Alexander** .....Disclosed no conflict of interest.

**Linus, Awuniji** .....Disclosed no conflict of interest.

**Lisonbee, Rich** .....Disclosed no conflict of interest.

**Lisonbee, Rich J** .....Disclosed no conflict of interest.

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

**Liu, Chuanju** .....Disclosed no conflict of interest.

**Liu, Jessica Z** .....Disclosed no conflict of interest.

**Liu, jiatong** .....Disclosed no conflict of interest.

**Liu, Jin** .....Disclosed no conflict of interest.

**Liu, Mengyao** .....Disclosed no conflict of interest.

**Liu, Shaohua** .....Disclosed no conflict of interest.

**Liu, X. Sherry** .....Disclosed no conflict of interest.

**Liu, Xiangyi (Cheryl)** .....3A: Stryker.

**Liu, Xuhui** .....Disclosed no conflict of interest.

**Liu, Xuihui** .....Disclosed no conflict of interest.

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

**Liu, Yin**.....Disclosed no conflict of interest.

**Liu, Yulei**.....Disclosed no conflict of interest.

**Llabre, Joan E** .....Disclosed no conflict of interest.

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

**Locke, Ryan C** .....Disclosed no conflict of interest.

**Loenen, Arjan** .....Disclosed no conflict of interest.

**Loflin, Ben** .....Disclosed no conflict of interest.

**Logterman, Stephanie** .....Disclosed no conflict of interest.

**Lohse, Keith R** .....Disclosed no conflict of interest.

**Loiselle, Alayna** .....Disclosed no conflict of interest.

**Longaray, Jason** .....3A: Stryker; 4: Stryker.

**Lopez, Juan D** .....Disclosed no conflict of interest.

**Loss, Jeremy G** .....Disclosed no conflict of interest.

**Lotz, Jeffrey** .....Disclosed no conflict of interest.

**Lotz, Jeffrey C** .....Disclosed no conflict of interest.

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

**Lowe, Timothy** .....Disclosed no conflict of interest.

**Lu, Helen** .....Disclosed no conflict of interest.

**Lu, Helen H** .....Disclosed no conflict of interest.

**Lu, X. Lucas** .....Disclosed no conflict of interest.

**Lucidi, Gian Andrea** .....Disclosed no conflict of interest.

**Ludwig, Kai D.** .....Disclosed no conflict of interest.

**Luk, Connie** .....Disclosed no conflict of interest.

**Luk, Josephine** .....Disclosed no conflict of interest.

**Lumry, Jessica** .....Disclosed no conflict of interest.

**Luo, Guotian** .....Disclosed no conflict of interest.

**Luo, Juntao** .....Disclosed no conflict of interest.

**Luo, Lijun** .....Disclosed no conflict of interest.

**Lustig, Sebastien** .....2: Smith & Nephew, Stryker; 3B: Smith & Nephew, Stryker.

**Ma, Chi**.....Disclosed no conflict of interest.

**Ma, Jinjin** .....Disclosed no conflict of interest.

**Ma, Yinjiao**.....Disclosed no conflict of interest.

**Ma'ayan, Avi**.....Disclosed no conflict of interest.

**MacDonald, Lucy** .....Disclosed no conflict of interest.

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

**Madhu, Vedavathi**.....Disclosed no conflict of interest.

**Madsen, Jan Erik**.....Disclosed no conflict of interest.

**Maeda, Tatsunori** .....Disclosed no conflict of interest.

**Maerz, Tristan**.....Disclosed no conflict of interest.

**Magneli, Martin**.....Disclosed no conflict of interest.

**Maher, Suzanne**.....4: AGility Biomechanics Corp; 9: Board Member of ORS.

**Mahmoud, Khadija**.....Disclosed no conflict of interest.

**Mahon, Olwyn R**.....Disclosed no conflict of interest.

**Mahtani, Gordhan B**.....Disclosed no conflict of interest.

**Majumdar, Sharmila**.....Disclosed no conflict of interest.

**Makarczyk, Meagan**.....Disclosed no conflict of interest.

**Mäkelä, Janne T A** .....Disclosed no conflict of interest.

**Malda, Jos**.....Disclosed no conflict of interest.

**Maldonado, David R**.....8: Arthroscopy Journal.

**Malfait, Anne-Marie**.....1: Eli Lilly; 2: Pfizer; 3A: AKP; 3B: 23andMe.

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

**Malkani, Arthur** .....1: Stryker; 2: Stryker; 3B: Stryker; 5: Stryker; 8: Journal of Arthroplasty; 9: AAOS Hip Committee Annual Meeting.

**Mallick, Umer** .....Disclosed no conflict of interest.

**Malloy, Philip**.....Disclosed no conflict of interest.

**Manal, Kurt**.....Disclosed no conflict of interest.

**Mandell, Jonathan B** .....Disclosed no conflict of interest.

**Mane, Amitkumar M**.....3A: DePuy Synthes; 4: Johnson and Johnson.

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

**Mannen, Erin M** .....5: International Hip Dysplasia Institute, Medtronic, Inc.

**Manrique, Nathaniel** .....Disclosed no conflict of interest.

**Mansur, Nacime Salomao B** .....Disclosed no conflict of interest.

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

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

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

**Marcolongo, Michele** .....Disclosed no conflict of interest.

**Marette, Shelly** .....Disclosed no conflict of interest.

**Markel, David** .....Disclosed no conflict of interest.

**Marrero, Luis** .....Disclosed no conflict of interest.

**Marsh, J** .....Disclosed no conflict of interest.

**Marsh, J. Lawrence** .....Disclosed no conflict of interest.

**Marshall, Glenda** .....Disclosed no conflict of interest.

**Martelli, Saulo** .....Disclosed no conflict of interest.

**Martin, R. Kyle** .....6: Arthrex, Linvatec, Mitek, Smith and Nephew.

**Martin, Scott D** .....Disclosed no conflict of interest.

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

**Martinez-Lozano, Edith** .....Disclosed no conflict of interest.

**Marvin, Jason C** .....Disclosed no conflict of interest.

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

**Mathew, Mathew** .....Disclosed no conflict of interest.

**Matijevich, Emily S** .....Disclosed no conflict of interest.

**Matsui, Yuichiro** .....Disclosed no conflict of interest.

**Matsumae, Gen** .....Disclosed no conflict of interest.

**Matsumoto, Yoshihiro** .....Disclosed no conflict of interest.

**Matsunami, Sansui** .....Disclosed no conflict of interest.

**Matsuoka, Masatake** .....Disclosed no conflict of interest.

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

**Mattingly, Brett T** .....Disclosed no conflict of interest.

**Mauck, Robert** .....5: 4Web; 8: JOR-Spine.

- Mauck, Robert** ..... 5: 4Web; 8: JOR Spine.
- Mauck, Robert** ..... 5: Company; 8: JOR Spine.
- Mauck, Robert** ..... 4: Web Medical; 5: Web Medical; 8: JOR Spine.
- Mauck, Robert L** ..... *Disclosed no conflict of interest.*
- Mauck, Robert L** ..... 5: Mechano-Therapeutics; 8: JOR Spine.
- Mayman, David** ..... 3B: Stryker; 4: Imagen, Insight, OrthAlign, Wishbone; 7A: OrthAlign, Smith & Nephew; 9: Hip Society, Knee Society.
- McAlinden, Audrey** ..... 8: Serve on the editorial.
- McCarthy, Edward** ..... *Disclosed no conflict of interest.*
- McCaskie, Andrew** ..... *Disclosed no conflict of interest.*
- McClendon, Mark** ..... *Disclosed no conflict of interest.*
- McDavid, Andrew** ..... *Disclosed no conflict of interest.*
- McFaline-Figueroa, Jennifer** ..... *Disclosed no conflict of interest.*
- McGee-Lawrence, Meghan E** .... *Disclosed no conflict of interest.*
- McIff, Terence E** ..... *Disclosed no conflict of interest.*
- McInnes, Iain** ..... *Disclosed no conflict of interest.*
- McKenzie, Jennifer** ..... *Disclosed no conflict of interest.*
- McKenzie, Jennifer A** ..... *Disclosed no conflict of interest.*
- McKinzie, David** ..... 3B: paid consultant; 4: pharmaceutical company stock.
- McLean, Michael** ..... *Disclosed no conflict of interest.*
- McNamara, Stephanie** ..... *Disclosed no conflict of interest.*
- McNeill, Tyler J** ..... *Disclosed no conflict of interest.*
- Meadows, Kyle** ..... *Disclosed no conflict of interest.*
- Meek, Wendy M** ..... *Disclosed no conflict of interest.*
- Mehrotra, Dev R** ..... *Disclosed no conflict of interest.*
- Mehta-D'Souza, Padmaja** ..... *Disclosed no conflict of interest.*
- Melkus, Gerd** ..... *Disclosed no conflict of interest.*
- Melnic, Christopher M** ..... *Disclosed no conflict of interest.*
- Mendez-Ferrer, Simon** ..... *Disclosed no conflict of interest.*
- Mengis, Tamara** ..... *Disclosed no conflict of interest.*

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

**Metzger, Corinne** .....Disclosed no conflict of interest.

**Metzger, Gregory J.** .....Disclosed no conflict of interest.

**Metzger, Melodie** .....5: Arthrex, Medtronic; 8: Arthroscopy Journal.

**Mevel, Elsa** .....Disclosed no conflict of interest.

**Meyer, Gretchen** .....Disclosed no conflict of interest.

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

**Mifune, Yutaka** .....Disclosed no conflict of interest.

**Migotsky, Nicole** .....Disclosed no conflict of interest.

**Mihalko, William M.** .....1: 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.

**Miles, Jon** .....Disclosed no conflict of interest.

**Millar, Neal** .....Disclosed no conflict of interest.

**Millecamps, Magali** .....Disclosed no conflict of interest.

**Miller, Anna N.** .....6: Smith & Nephew; 8: JOT, JAAOS; 9: OTA, ACS COT, AOA.

**Miller, Aspen** .....Disclosed no conflict of interest.

**Miller, Kirsten C.** .....Disclosed no conflict of interest.

**Miller, Mark Carl** .....Disclosed no conflict of interest.

**Miller, Rachel E.** .....Disclosed no conflict of interest.

**Mills, Candee** .....Disclosed no conflict of interest.

**Mills, Emily** .....Disclosed no conflict of interest.

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

**Moatshe, Gilbert** .....Disclosed no conflict of interest.

**Moeller, Steen** .....Disclosed no conflict of interest.

**Moharrer, Yasaman** .....Disclosed no conflict of interest.

**Momenzadeh, Kaveh** .....Disclosed no conflict of interest.

**Monahan, Genna E.** .....Disclosed no conflict of interest.

**Mononen, Mika E** .....Disclosed no conflict of interest.

**Monte, Felipe** .....Disclosed no conflict of interest.

**Montero, Angela** .....Disclosed no conflict of interest.

**Moody, Maya C** .....Disclosed no conflict of interest.

**Mookerjee, Gaurav G** .....Disclosed no conflict of interest.

**Mooney, David** .....Disclosed no conflict of interest.

**Mooney, David J** .....5: Novartis.

**Moore, Douglas** .....Disclosed no conflict of interest.

**Morales Martinez, Alejandro** ....Disclosed no conflict of interest.

**Morgan Pope, Samuel** .....Disclosed no conflict of interest.

**Morgese, Giulia** .....Disclosed no conflict of interest.

**Morita, Wataru**.....Disclosed no conflict of interest.

**Morrey, Mark** .....4: Tenex.

**Morris, Carol** .....Disclosed no conflict of interest.

**Morris, Evan**.....Disclosed no conflict of interest.

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

**Morton, Amy** .....Disclosed no conflict of interest.

**Mosley, Amber** .....Disclosed no conflict of interest.

**Motesharei, Arman** .....3A: Stryker.

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

**Moy, Jamie** .....Disclosed no conflict of interest.

**Mozingo, Joseph D** .....Disclosed no conflict of interest.

**Muir, Victoria G.** .....Disclosed no conflict of interest.

**Muirhead-Allwood, Sarah K**.....Disclosed no conflict of interest.

**Mukherjee, Noyonika**.....Disclosed no conflict of interest.

**Mukohara, Shintaro** .....Disclosed no conflict of interest.

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

**Munsch, Maria**.....Disclosed no conflict of interest.

**Murakami, Hideki**.....Disclosed no conflict of interest.

**Murakami, Masaaki**.....Disclosed no conflict of interest.

**Muratoglu, Orhun** .....2: DePuy Synthes, Zimmer Biomet, Total Joint Orthopedics, Exactech; 3A: Stryker, Arthrex, Zimmer Biomet, Conformis, Corin, Kyocera, Meril Healthcare, Exactech; 4: Total Joint Orthopedics; 9: Alchimist, Cambridge Polymer Group, Orthopedic Technology Group.

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

- Murphy, Conor** .....Disclosed no conflict of interest.
- Murray, John** .....Disclosed no conflict of interest.
- Murthi, Anand** .....1: Depuy Inc, Globus Medical, Aevumed, Ignite Orthopaedics; 3B: Ignite Ortho, Depuy, Globus; 4: Right Tracks, Catalyst Orthoscience, Ignite Ortho; 8: Journal Shoulder and Elbow Surgery, Current Orthop Practice; 9: Association of Clinical Elbow and Shoulder Surgeons.
- Musahl, Volker** .....6: Smith&Nephew, Arthrex.
- Muscat, Samantha**.....Disclosed no conflict of interest.
- Myers, Casey**.....Disclosed no conflict of interest.
- Nabeshima, Akira** .....Disclosed no conflict of interest.
- Nadeem, Aftab** .....Disclosed no conflict of interest.
- Naessig, Sara A** .....Disclosed no conflict of interest.
- Nagle, Tara F** .....1: Cleveland Clinic, simVITRO.
- Naito, Yohei** .....Disclosed no conflict of interest.
- Nakagawa, Makoto** .....Disclosed no conflict of interest.
- Nakashima, Yasuharu**.....Disclosed no conflict of interest.
- Nam, Sungmin** .....Disclosed no conflict of interest.
- Namiri, Nikan**.....Disclosed no conflict of interest.
- Nasamran, Chanond A** .....Disclosed no conflict of interest.
- Nasrollahzadeh1, Naser** .....Disclosed no conflict of interest.
- Nazal, Mark R** .....Disclosed no conflict of interest.
- Nazarian, Ara** .....Disclosed no conflict of interest.
- Neal, Kelsey** .....Disclosed no conflict of interest.
- Neal, Sydney** .....Disclosed no conflict of interest.
- Negri, Stefano** .....Disclosed no conflict of interest.
- Nelson, Bradley** .....Disclosed no conflict of interest.
- Nelson, Bradley J.** .....Disclosed no conflict of interest.
- Nelson, Trevor J** .....Disclosed no conflict of interest.
- Neri, John P** .....Disclosed no conflict of interest.
- Ng, Geoffrey** .....Disclosed no conflict of interest.
- Ng, Michael** .....Disclosed no conflict of interest.
- Nguyen, Anthony** .....Disclosed no conflict of interest.

**Nguyen, Phong K** .....Disclosed no conflict of interest.

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

**Nho, Shane J** .....5: CONMED Linvatec, OSSÜR, Allosource, Arthrex, DJ Orthopaedics, Athletico, Miomed, Smith & Nephew, Stryker.

**Nichols, Anne**.....Disclosed no conflict of interest.

**Nickolas, Thomas**.....Disclosed no conflict of interest.

**Nieminen, Miika T.** .....Disclosed no conflict of interest.

**Nigh, Evan D**.....4: Amgen.

**Nisure, Madhura** .....Disclosed no conflict of interest.

**Nippolainen, Ervin** .....Disclosed no conflict of interest.

**Nishida, Kyohei**.....Disclosed no conflict of interest.

**Nishimoto, Hanako**.....Disclosed no conflict of interest.

**Nishimura, Nozomi**.....Disclosed no conflict of interest.

**Nishtala, Sita Nirupama** .....Disclosed no conflict of interest.

**Noble, Philip** .....1: Zimmer Biomet;Stryker; 3B: Zimmer Biomet;; 4: Joint View,LLC; 6: Zimmer Biomet;DJO; 7B: Springer; 8: Journal of Hip Preservation Surgery; 9: International Society for Technology in Arthroplasty.

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

**Noll, Alexander** .....Disclosed no conflict of interest.

**Nolte, Mike** .....Disclosed no conflict of interest.

**Noori-Dokht, Hessam** .....Disclosed no conflict of interest.

**Nouraee, Cyrus M**.....Disclosed no conflict of interest.

**Novais, Eduardo N** .....Disclosed no conflict of interest.

**Novais, Emanuel J**.....Disclosed no conflict of interest.

**Novak, Kimberly** .....Disclosed no conflict of interest.

**Nowinka, Zuzanna** .....Disclosed no conflict of interest.

**Nowlan, Niamh C**.....Disclosed no conflict of interest.

**Nulty, Jessica** .....Disclosed no conflict of interest.

**Nurse, Cameron A** .....Disclosed no conflict of interest.

**Nuss, Courtney** .....Disclosed no conflict of interest.

**Nustad, Jordan L** .....Disclosed no conflict of interest.

**Nuthalapati, Prashant** .....Disclosed no conflict of interest.

**Nyayapati, Priya** .....Disclosed no conflict of interest.

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

**O'Brien, Fergal** .....Disclosed no conflict of interest.

**O'Brien, Fergal J**.....6: Integra Life Sciences, J&J.

**O'Brien, Fergal J.**.....6: Integra Life Sciences, J&J.

**O'Brien, Fergal J.**.....5: LocateBio, Johnson&Johnson, Integra LifeSciences, SurgaColl.

**O'Byrne, John M.** .....Disclosed no conflict of interest.

**O'Driscoll, Caitriona M** .....Disclosed no conflict of interest.

**O'Keefe, Regis J** .....Disclosed no conflict of interest.

**O'Malley, Michael** .....Disclosed no conflict of interest.

**O'Neill, Conor** .....Disclosed no conflict of interest.

**O'Neill, Conor W.**.....Disclosed no conflict of interest.

**O'Rourke, Dermot** .....Disclosed no conflict of interest.

**Obaji, Mariam**.....Disclosed no conflict of interest.

**Obeidat, Alia M** .....Disclosed no conflict of interest.

**Ochocki, Danielle N** .....Disclosed no conflict of interest.

**Ockerhausen, Hayley** .....Disclosed no conflict of interest.

**Oda, Yoshinao**.....Disclosed no conflict of interest.

**Oestreich, Arin K.** .....Disclosed no conflict of interest.

**Oh, Irvin** .....Disclosed no conflict of interest.

**Ohashi, Yoshifumi** .....Disclosed no conflict of interest.

**Ohkoshi, Yasumitsu** .....Disclosed no conflict of interest.

**Oktarina, Anastasia** .....Disclosed no conflict of interest.

**Okubo, Norio** .....Disclosed no conflict of interest.

**Olsen, Zachary** .....Disclosed no conflict of interest.

**Olsson, Martin A.**.....Disclosed no conflict of interest.

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

**Onodera, Tomohiro** .....Disclosed no conflict of interest.

**Orías, Alejandro A Espinoza** .....Disclosed no conflict of interest.

**Orozco, Gustavo A** .....Disclosed no conflict of interest.

**Orozco, Gustavo A** .....Disclosed no conflict of interest.

**Ortmann, Stephen D** .....Disclosed no conflict of interest.

**Oswald, Alexandra** .....3A: Zimmer Biomet.

**Otero, Miguel** .....Disclosed no conflict of interest.

**Ouellet, Jean A** .....Disclosed no conflict of interest.

**Overman, Steven** .....3B: KenSci, Inc.

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

**Owen, Meredith** .....Disclosed no conflict of interest.

**Owings, Tammy** .....Disclosed no conflict of interest.

**Oyama, Ryunosuke** .....Disclosed no conflict of interest.

**Ozevin, Didem** .....Disclosed no conflict of interest.

**Pacheco-Flores, Haydee** .....Disclosed no conflict of interest.

**Pachuda, Nicholas** .....3A: Peptilogics.

**Pacicca, Donna** .....9: ORS Chair of Public Outreach, ORS Meniscus Section Member-at-large.

**Pacifci, Maurizio** .....Disclosed no conflict of interest.

**Paiement, Guy D** .....Disclosed no conflict of interest.

**Palm-Vlasak, Lindsey** .....Disclosed no conflict of interest.

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

**Panfilov, Egor** .....Disclosed no conflict of interest.

**Pannellini, Tania** .....Disclosed no conflict of interest.

**Papalamprou, Angela** .....Disclosed no conflict of interest.

**Paranjape, Chinmay** .....Disclosed no conflict of interest.

**Pareatumbee, Pivatidevi** .....Disclosed no conflict of interest.

**Pareek, Ayoosh** .....Disclosed no conflict of interest.

**Parente, James B** .....Disclosed no conflict of interest.

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

**Park, Gil Young** .....Disclosed no conflict of interest.

**Park, Hyung Chul** .....Disclosed no conflict of interest.

**Park, Min Sung**.....Disclosed no conflict of interest.

**Park, Na Rae** .....Disclosed no conflict of interest.

**Parker, Dana M**.....Disclosed no conflict of interest.

**Parker, Emily**.....Disclosed no conflict of interest.

**Parsons, Moby** .....3B: Exactech, Inc.

**Parvini, Shayan** .....Disclosed no conflict of interest.

**Pastinen, Tomi** .....Disclosed no conflict of interest.

**Patel, Jay** .....3B: paid consultant; 4: owns stock.

**Patel, Neeraj** .....Disclosed no conflict of interest.

**Paulus, Paige**.....Disclosed no conflict of interest.

**Pedoia, Valentina** .....Disclosed no conflict of interest.

**Peffers, Mandy J** .....8: Equine Veterinary Journal.

**Pei, Shaopeng** .....Disclosed no conflict of interest.

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

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

**Penenberg, Brad L** .....3B: United Orthopaedics; 3C: RadLink; 4: RadLink; 7A: Microport, Zimmer.

**Pennings, Jacquelyn** .....Disclosed no conflict of interest.

**Peredo, Ana P** .....Disclosed no conflict of interest.

**Perry, Tiffany** .....3B: Misonix.

**Persad, Lomas S** .....Disclosed no conflict of interest.

**Persson, Andreas**.....Disclosed no conflict of interest.

**Peters, Christopher L** .....1: ZimmerBiomet; 9: Knee Society, OrthoGrid LLC.

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

**Peterson, Andrew C**.....Disclosed no conflict of interest.

**Petite, Hervé**.....Disclosed no conflict of interest.

**Petterson, Stephanie**.....Disclosed no conflict of interest.

**Peymanfar, Yaser** .....6: Genentech company material transfer.

**Pham, Christine T.N.**.....Disclosed no conflict of interest.

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

**Phillips, Evan**.....Disclosed no conflict of interest.

**Phillips, Tessa** .....Disclosed no conflict of interest.

**Piacentini, Alexander** .....Disclosed no conflict of interest.

**Pietrosimone, Brian G** .....Disclosed no conflict of interest.

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

**Pinnamaneni, Sridhar** .....Disclosed no conflict of interest.

**Pioletti, Dominique** .....Disclosed no conflict of interest.

**Piple, Amit** .....Disclosed no conflict of interest.

**Piva, Sara** .....Disclosed no conflict of interest.

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

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

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

**Plassche, Grace** .....Disclosed no conflict of interest.

**Pleshko, Nancy** .....Disclosed no conflict of interest.

**Plotkin, Lilian** .....Disclosed no conflict of interest.

**Poitras, Stephane** .....Disclosed no conflict of interest.

**Polamalu, Sene** .....Disclosed no conflict of interest.

**Pollitt, Eleanor N.** .....Disclosed no conflict of interest.

**Polster, Joshua**.....4: Mediphany.

**Porter, Annie** .....Disclosed no conflict of interest.

**Potier, Esther** .....Disclosed no conflict of interest.

**Potluri, Tanvi** .....Disclosed no conflict of interest.

**Potter, Hollis** .....5: GE Healthcare.

**Potter, Hollis G** .....5: GE Healthcare.

**Pourzal, Robin**.....Disclosed no conflict of interest.

**Powel, Dexter** .....Disclosed no conflict of interest.

**Power, Rachael N.** .....Disclosed no conflict of interest.

**Pranatharthi-Haran, Annapurna**        Disclosed no conflict of interest.

**Presley, Terry**.....Disclosed no conflict of interest.

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

**Provencher, Matthew** .....1: Arthrex, Smith & Nephew, Ossur; 9: AOSSM.

**Prudnikova, Katsiaryna** .....Disclosed no conflict of interest.

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

**Pryce, Brian A** .....Disclosed no conflict of interest.

**Pugliese, Brenna R** .....Disclosed no conflict of interest.

**Pyle, Sienna C** .....Disclosed no conflict of interest.

**Qadri, Marwa** .....Disclosed no conflict of interest.

**Qazi, Taimoor H.** .....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.

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

**Rabenhorst, Brien M** .....Disclosed no conflict of interest.

**Ragipoglu, Deniz** .....Disclosed no conflict of interest.

**Rai, Ajinkya** .....Disclosed no conflict of interest.

**Rai, Muhammad Farooq** .....Disclosed no conflict of interest.

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

**Rajaei, Sean S** .....Disclosed no conflict of interest.

**Rajapakse, Chamith S** .....Disclosed no conflict of interest.

**Rakhra, Kawan** .....Disclosed no conflict of interest.

**Rana, Adam J** .....1: Smith Nephew; 2: Smith Nephew; 3B: Smith Nephew.

**Randall, Lindsey** .....Disclosed no conflict of interest.

**Rashidi, Neda** .....Disclosed no conflict of interest.

**Rauck, Ryan C.** .....Disclosed no conflict of interest.

**Rebello, Elliott** .....Disclosed no conflict of interest.

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

**Redwine, Adan R** .....Disclosed no conflict of interest.

**Reesink, Heidi L** .....Disclosed no conflict of interest.

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

**Reilly, Gwendolen C** .....Disclosed no conflict of interest.

**Reina, Nicolas** .....3B: Stryker, Adler; 4: Digikare.

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

**Ren, Weiping** .....Disclosed no conflict of interest.

**Ren, Yinshi** .....Disclosed no conflict of interest.

**Reuter, John M** .....Disclosed no conflict of interest.

**Reuther, Katie** .....Disclosed no conflict of interest.

**Reyes, Justin** .....Disclosed no conflict of interest.

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

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

**Ricchetti, Eric** .....1: DJO; 3B: DJO, Depuy; 8: JSES; 9: Am Board of Ortho Surgery, ASES, AAOS.

**Risbud, Makarand** .....Disclosed no conflict of interest.

**Risbud, Makarand V** .....Disclosed no conflict of interest.

**Ristaniemi, Aapo** .....Disclosed no conflict of interest.

**Rivas, Dominic J.L.** .....Disclosed no conflict of interest.

**Robbins, Paul** .....1: 4, Has stock in Genascence Inc.

**Roberts, Joseph L** .....Disclosed no conflict of interest.

**Robey, Pamela** .....Disclosed no conflict of interest.

**Roche, Christopher** .....3A: Exactech, Inc.; 4: Exactech, Inc.

**Roche, Christopher** .....3A: Exactech, Inc; 4: Exactech Inc.

**Rock, Mick J.** .....3A: DePuy Synthes; 4: Johnson and Johnson.

**Rodeo, Scott** .....Disclosed no conflict of interest.

**Rodeo, Scott A** .....Disclosed no conflict of interest.

**Rodrigues, Danieli** .....Disclosed no conflict of interest.

**Roh, Kyung-Min** .....Disclosed no conflict of interest.

**Rothrauff, Benjamin B** .....Disclosed no conflict of interest.

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

**Routman, Howard** .....3B: Exactech, Inc; 7A: Exactech, Inc.

**Rucinski, Kylee** .....Disclosed no conflict of interest.

**Rueff, Matthew** .....3A: Exactech.

**Rullkoetter, Paul** .....5: Depuy Synthes.

**Ruoss, Severin** .....*Disclosed no conflict of interest.*

**Rux, Caleb** .....*Disclosed no conflict of interest.*

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

**Rylander, Jonathan** .....*Disclosed no conflict of interest.*

**Rzeczycki, Phillip** .....*Disclosed no conflict of interest.*

**Saarakkala, Simo** .....*Disclosed no conflict of interest.*

**Saccone, Nancy** .....7B: U.S. Patent 8,080,371.

**Sadowska, Joanna** .....*Disclosed no conflict of interest.*

**Safadi, Fayed F** .....*Disclosed no conflict of interest.*

**Sahoo, Sambit** .....1: Viscus; 4: Becton Dickinson, J&J, Medtronic.

**Said, Mohamed** .....*Disclosed no conflict of interest.*

**Sakai, Daisuke** .....3B: TUNZ Pharma Co. Ltd.; 8: JOR Spine.

**Sako, Kosuke** .....*Disclosed no conflict of interest.*

**Sakurai, Shigeyuki** .....*Disclosed no conflict of interest.*

**Salehi, Khosrowdad** .....*Disclosed no conflict of interest.*

**Salehi, Koz** .....*Disclosed no conflict of interest.*

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

**Saliken, David** .....*Disclosed no conflict of interest.*

**Salomao Barbachan Mansur, Nacime** .....*Disclosed no conflict of interest.*

**Saltzman, Charles** .....3B: Zimmer-Biomet.

**Saltzman, Charles L.** .....3B: Zimmer-Biomet.

**Samartzis, Dino** .....*Disclosed no conflict of interest.*

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

**Sanchez-Sotelo, Joaquin** .....2: Stryker; 3B: Exactech, Inc, Precision OS, Acumed; 4: PSI; 5: Stryker; 7A: Stryker; 7B: Elsevier, Journal of Shoulder and Elbow Surgery, Oxford University Press; 8: Journal of Shoulder and Elbow Surgery.

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

**Santangelo, Kelly S** .....*Disclosed no conflict of interest.*

**Sasaya, Kazuki** .....*Disclosed no conflict of interest.*

**Saunders, Cheri M** .....Disclosed no conflict of interest.

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

**Sayari, Arash** .....Disclosed no conflict of interest.

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

**Schaer, Thomas** .....Disclosed no conflict of interest.

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

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

**Scheidt, Karl B** .....Disclosed no conflict of interest.

**Scheidt, Robert A** .....Disclosed no conflict of interest.

**Scheys, Lennart** .....Disclosed no conflict of interest.

**Schiavi-Tritz, Jessica** .....Disclosed no conflict of interest.

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

**Schifino, Albino G** .....Disclosed no conflict of interest.

**Schilling Jr., Kevin** .....Disclosed no conflict of interest.

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

**Schinke, Thorsten** .....Disclosed no conflict of interest.

**Schipani, Ernestina** .....Disclosed no conflict of interest.

**Schipani, Rossana** .....Disclosed no conflict of interest.

**Schlecht, Stephen H** .....Disclosed no conflict of interest.

**Schmale, Gregory** .....6: SIGN Fracture Care International, Arthrex.

**Schmaranzer, Florian** .....Disclosed no conflict of interest.

**Schnabel, Lauren V** .....Disclosed no conflict of interest.

**Schneider, Gary** .....Disclosed no conflict of interest.

**Schoch, Bradley** .....3B: Exactech, Inc.

**Schol, Jordy** .....Disclosed no conflict of interest.

**Schott, Hayden** .....Disclosed no conflict of interest.

**Schüpbach, Regula** .....Disclosed no conflict of interest.

**Schütze, Konrad** .....Disclosed no conflict of interest.

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

**Schweitzer, Ronen** .....Disclosed no conflict of interest.

**Sculco, Peter** .....3A: EOS Imaging, Intellijoint Surgical, Lima Corporate, Zimmer, DePuy, A Johnson & Johnson Company, Parvizi Surgical Innovation; 5: Intellijoint Surgical.

**Sebastian, Sugeesh**.....*Disclosed no conflict of interest.*

**Seiden, Emily E** .....*Disclosed no conflict of interest.*

**Selders, Gretchen S.** .....3A: Medtronic.

**Sellon, Jacob** .....*Disclosed no conflict of interest.*

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

**Senter, Rebecca K** .....3A: Flexion Therapeutics, Inc; 4: Flexion Therapeutics, Inc.

**Seo, Bo Ri** .....*Disclosed no conflict of interest.*

**Serna, Alfred** .....*Disclosed no conflict of interest.*

**Sessions, Garrett A** .....*Disclosed no conflict of interest.*

**Setsu, Nokitaka**.....*Disclosed no conflict of interest.*

**Setton, Lori** .....*Disclosed no conflict of interest.*

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

**Shammas, Helen** .....*Disclosed no conflict of interest.*

**Shapiro, Irving M** .....*Disclosed no conflict of interest.*

**Shapiro, Lauren** .....*Disclosed no conflict of interest.*

**Sharma, Deepika** .....*Disclosed no conflict of interest.*

**Shaw, Jeremy** .....7A: travel meeting support Stryker, Zimmer, Depuy.

**Sheehy, Eamon** .....*Disclosed no conflict of interest.*

**Shelest, Oksana** .....*Disclosed no conflict of interest.*

**Shemo, Cathy**.....*Disclosed no conflict of interest.*

**Shen, Huaishuang** .....*Disclosed no conflict of interest.*

**Shen, Leyao**.....*Disclosed no conflict of interest.*

**Shen, Peter C** .....*Disclosed no conflict of interest.*

**Shen, Tony S** .....*Disclosed no conflict of interest.*

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

**Sheyn, Dmitriy** .....*Disclosed no conflict of interest.*

**Shi, Xingming** .....*Disclosed no conflict of interest.*

**Shikanov, Ariella**.....*Disclosed no conflict of interest.*

- Shimada, Eijiro** ..... *Disclosed no conflict of interest.*
- Shimizu, Tomohiro** ..... *Disclosed no conflict of interest.*
- Shimmin, Andrew** ..... 1: Corin, MatOrtho; 3B: Corin, MatOrtho; 3C: 360 Med Care; 4: Corin.
- Shin, Alexander Y** ..... *Disclosed no conflict of interest.*
- Shin, Beomsu** ..... *Disclosed no conflict of interest.*
- Shin, Jae-Won** ..... *Disclosed no conflict of interest.*
- Shinohara, Issei** ..... *Disclosed no conflict of interest.*
- Shirazi-Adl, Saeed** ..... *Disclosed no conflict of interest.*
- Shore, Eileen M** ..... *Disclosed no conflict of interest.*
- Short, Walter H** ..... *Disclosed no conflict of interest.*
- Shu, Fei** ..... *Disclosed no conflict of interest.*
- Shutter, Jennifer A** ..... *Disclosed no conflict of interest.*
- Siddicky, Safeer F** ..... *Disclosed no conflict of interest.*
- Siebenrock, Klaus** ..... *Disclosed no conflict of interest.*
- Siggelkow, Eik** ..... 3A: Zimmer Biomet; 4: Zimmer Biomet.
- Sij, Ethan W** ..... *Disclosed no conflict of interest.*
- Silva, Matthew** ..... 7B: Receive royalties; 8: Serve on the editorial; 9: Serve on the Board of Directors.
- Silva, Matthew J** ..... 8: Editorial Board: JOR, Bone, CTI; 9: Board of Directors: ORS.
- Silva, Matthew J.** ..... 8: JOR, Bone, CTI; 9: ORS.
- Simon, Peter** ..... *Disclosed no conflict of interest.*
- Simovitch, Ryan** ..... 3B: Exactech, Inc.; 7A: Exactech, Inc.
- Singh, Anhuman** ..... *Disclosed no conflict of interest.*
- singh, Purva** ..... *Disclosed no conflict of interest.*
- Singhal, Mo** ..... *Disclosed no conflict of interest.*
- Small, David M** ..... *Disclosed no conflict of interest.*
- Smith, Hannah** ..... *Disclosed no conflict of interest.*
- Smith, Jay** ..... *Disclosed no conflict of interest.*
- Smith, Kyra W.Y.** ..... *Disclosed no conflict of interest.*
- Smith, Lachlan** ..... 8: JOR Spine, Connective Tissue Research, PLOS One; 9: ORS Spine Section, National MPS Society.

**Smith, Langan S** .....Disclosed no conflict of interest.

**Smith, Lucas** .....Disclosed no conflict of interest.

**Smith, Matthew J** .....1: DePuy, A Johnson & Johnson Company, Ignite Orthopedics; 2: Arthrex, DePuy, A Johnson & Johnson Company; 3B: Zimmer; 4: Ignite Orthopedics; 5: Arthrex, Inc, Wright Medical Technology, Inc.

**Smith, Richard A** .....Disclosed no conflict of interest.

**Smolinski, Anne K** .....Disclosed no conflict of interest.

**Smolinski, Kathryn L** .....Disclosed no conflict of interest.

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

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

**Snyder, Brian D** .....Disclosed no conflict of interest.

**Snyder-Mackler, Lynn** .....Disclosed no conflict of interest.

**Sodhi, Alisha** .....Disclosed no conflict of interest.

**Soher, Brian J** .....Disclosed no conflict of interest.

**Sokhi, Upneet** .....Disclosed no conflict of interest.

**Sollmann, Nico** .....Disclosed no conflict of interest.

**Soltanihafshejani, Navid** .....Disclosed no conflict of interest.

**Somerville, Lyndsay** .....Disclosed no conflict of interest.

**Son, Yooha** .....Disclosed no conflict of interest.

**Song, Katie** .....Disclosed no conflict of interest.

**Sorensen, Jacob R** .....Disclosed no conflict of interest.

**Sosa, Branden** .....Disclosed no conflict of interest.

**Soslowsky, Lou** .....Disclosed no conflict of interest.

**Soslowsky, Louis J** .....Disclosed no conflict of interest.

**South, Sanique M** .....Disclosed no conflict of interest.

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

**Spang, Jeffrey T** .....Disclosed no conflict of interest.

**Speirs, Andrew D** .....Disclosed no conflict of interest.

**Spiller, Kassandra** .....Disclosed no conflict of interest.

**Spirig, José Miguel** .....Disclosed no conflict of interest.

**Spitzer, Andrew** .....2: AO Recon; 3B: Depuy, Flexion Therapeutics.

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

**Springer, Luke E.** .....Disclosed no conflict of interest.

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

**Spritzer, Charles E.** .....Disclosed no conflict of interest.

**Spritzer, Charles E.** .....Disclosed no conflict of interest.

**Spusta, Steven** .....Disclosed no conflict of interest.

**Srour, Edward F.** .....Disclosed no conflict of interest.

**Stake, Ingrid K.** .....6: Arthrex, Inc: Other financial or material support.

**Stannard, James P** .....3B: Arthrex, Inc, 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.

**Starlinger, Julia** .....Disclosed no conflict of interest.

**Stefanovich, Tina** .....Disclosed no conflict of interest.

**Steinberg, David** .....Disclosed no conflict of interest.

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

**Stephenson, Stacy M** .....Disclosed no conflict of interest.

**Steppacher, Simon D** .....Disclosed no conflict of interest.

**Steppe, Lena** .....Disclosed no conflict of interest.

**Stewart, Holly** .....Disclosed no conflict of interest.

**Stief, Felix** .....Disclosed no conflict of interest.

**Stocco, Simone** .....Disclosed no conflict of interest.

**Stock, Stuart** .....Disclosed no conflict of interest.

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

**Stoeckl, Brendan D** .....Disclosed no conflict of interest.

**Stoker, Aaron M** .....1: Musculoskeletal Transplant Foundation.

**Stone, Austin** .....3C: Allosource, Smith & Nephew; 5: Allosource, Flexion Therapeutics; 9: AOSSM, AANA.

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

**Stoneback, Jason W** .....Disclosed no conflict of interest.

**Storer, Luke** .....Disclosed no conflict of interest.

**Strnad, Greg** .....1: OBERD.

**Stubbs, Caleb** .....Disclosed no conflict of interest.

**Studders, Carson** .....Disclosed no conflict of interest.

**Stulberg, Jonah J.**.....Disclosed no conflict of interest.

**Stupp, Samuel**.....Disclosed no conflict of interest.

**Sturgeon, Callahan** .....6: Smith Nephew.

**Styring, Emelie**.....Disclosed no conflict of interest.

**Su, Ni** .....Disclosed no conflict of interest.

**Su, Yu-Wen** .....Disclosed no conflict of interest.

**Subih, Murad** .....Disclosed no conflict of interest.

**Sudo, Akihiro** .....Disclosed no conflict of interest.

**Sudo, Hideki**.....Disclosed no conflict of interest.

**Sugimoto, Katsumasa**.....Disclosed no conflict of interest.

**Suhardi, Vincentius J** .....Disclosed no conflict of interest.

**Sullivan, Breanna**.....Disclosed no conflict of interest.

**Sun, Mei** .....Disclosed no conflict of interest.

**Suri, Abhinav** .....Disclosed no conflict of interest.

**Susuki, Yosuke** .....Disclosed no conflict of interest.

**Suzuki, Shoji** .....Disclosed no conflict of interest.

**Suzuki, Yuki** .....Disclosed no conflict of interest.

**Swaroop, Vineeta** .....Disclosed no conflict of interest.

**Szeto, Greg**.....4: multiple; 7A: sqz biotechnologies.

**Szeto, Hazel H** .....Disclosed no conflict of interest.

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**Tachi, Hiroyuki** .....Disclosed no conflict of interest.

**Tagil, Magnus**.....4: MT holds stocks of Moroxite AB, Sweden.

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**Tägil, Magnus**.....4: Moroxite AB, Sweden.

**Taguchi, Masashi** .....Disclosed no conflict of interest.

**Takaba, Keishi**.....Disclosed no conflict of interest.

**Takahashi, Daisuke**.....Disclosed no conflict of interest.

**Takahashi, Ikuko**.....Disclosed no conflict of interest.

**Takahashi, Nobunori** .....Disclosed no conflict of interest.

**Takenaga, Tetsuya**.....Disclosed no conflict of interest.

**Takeuchi, Satoshi**.....Disclosed no conflict of interest.

**Talentino, Spencer**.....Disclosed no conflict of interest.

**Tamerler, Candan C** .....Disclosed no conflict of interest.

**Tan, Ek T** .....5: GE Healthcare.

**Tan, Guak-Kim** .....Disclosed no conflict of interest.

**Tan, Mann Hong** .....Disclosed no conflict of interest.

**Tan, Xiaohong**.....Disclosed no conflict of interest.

**Tanaka, Toshikazu** .....Disclosed no conflict of interest.

**Tandberg, Felix** .....Disclosed no conflict of interest.

**Tang, Cammy** .....Disclosed no conflict of interest.

**Tang, Ruhang** .....Disclosed no conflict of interest.

**Tang, Simon** .....9: Serve on the Board of Directors or committee of any medical-related company and/or orthopaedic professional society.

**Tang, Sisi** .....Disclosed no conflict of interest.

**Taniguchi, Cullen** .....Disclosed no conflict of interest.

**Tannast, Moritz** .....Disclosed no conflict of interest.

**Tanska, Petri** .....Disclosed no conflict of interest.

**Taratuta, Elena** .....Disclosed no conflict of interest.

**Tata, Zachary** .....Disclosed no conflict of interest.

**Tautges, Seth** .....Disclosed no conflict of interest.

**Tawackoli, Wafa** .....Disclosed no conflict of interest.

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

**Taylor, Deanne** .....Disclosed no conflict of interest.

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

**Taylor, Matthew J.** .....Disclosed no conflict of interest.

**Taylor, Samuel** .....3B: DJO.

**Taylor, Samuel** .....1: Don Joy Orthopedics.

**Tazegul, Tutku** .....Disclosed no conflict of interest.

**Teater, Rachel H** .....Disclosed no conflict of interest.

**Teeter, Matthew** .....9: CORS, Canadian RSA Network, ISTA.

**Teguh, Dian A** .....Disclosed no conflict of interest.

**Telfer, Scott** .....Disclosed no conflict of interest.

**Tempfer, Herbert**.....Disclosed no conflict of interest.

**Terabe, Kenya**.....Disclosed no conflict of interest.

**Teredesai, Ankur** .....3A: KenSci, Inc.

**Terkawi, Alaa** .....Disclosed no conflict of interest.

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

**Tetteh, Gifty**.....Disclosed no conflict of interest.

**Tewari, Nikhil P.** .....Disclosed no conflict of interest.

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

**Thomopoulos, Stavros** .....Disclosed no conflict of interest.

**Thompson, Jacob D** .....Disclosed no conflict of interest.

**Thompson, William R** .....Disclosed no conflict of interest.

**Throckmorton, Thomas**.....3B: Exactech, Inc; 7A: Exactech, Inc.

**Tian, Yuan** .....Disclosed no conflict of interest.

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

**Titi, Hatem M**.....Disclosed no conflict of interest.

**Tiulpin, Aleksei** .....Disclosed no conflict of interest.

**Tkachev, Alexander** .....Disclosed no conflict of interest.

**Tokunaga, Kunihiko**.....Disclosed no conflict of interest.

**Tompkins, Marc A.** .....Disclosed no conflict of interest.

**Tone, Shine** .....Disclosed no conflict of interest.

**Tong, Xinming**.....Disclosed no conflict of interest.

**Tong, Yanrong**.....Disclosed no conflict of interest.

**Torrollion, Marine** .....3A: Blue-Ortho.

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

**Toth, Jeffrey M.** .....3B: Medtronic, Ossifi, Dymicron; 5: Medtronic.

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

**Tower, Robert J** .....Disclosed no conflict of interest.

**Toyras, Juha**.....Disclosed no conflict of interest.

**Tran, Victoria A**.....Disclosed no conflict of interest.

**Traweger, Andreas** .....Disclosed no conflict of interest.

**Trippel, Stephen** .....3B: Pfizer; 7A: Johnson&Johnson

**Trippel, Stephen B** .....Disclosed no conflict of interest.

**Trousdale, Will**.....Disclosed no conflict of interest.

**Tsai, Ariane** .....Disclosed no conflict of interest.

**Tsinman, Tonia K** .....Disclosed no conflict of interest.

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

**Tsubosaka, Masanori** .....Disclosed no conflict of interest.

**Tsuchiya, Atsushi** .....Disclosed no conflict of interest.

**Tsuchiya, Saho** .....Disclosed no conflict of interest.

**Tuffaha, Sami H** .....Disclosed no conflict of interest.

**Tuladhar, Anik** .....Disclosed no conflict of interest.

**Turajane, Kathleen** .....Disclosed no conflict of interest.

**Twiggs, Joshua** .....3A: 360 Med Care.

**Tyson, Scabeck** .....Disclosed no conflict of interest.

**Tzoc-Pacheco, Elias G.** .....Disclosed no conflict of interest.

**Ueki, Yasuyoshi** .....Disclosed no conflict of interest.

**Uemura, Keisuke** .....Disclosed no conflict of interest.

**Ukishiro, Kengo** .....Disclosed no conflict of interest.

**Unal, Mustafa** .....Disclosed no conflict of interest.

**Uppuganti, Sasidhar** .....Disclosed no conflict of interest.

**Urish, Kenneth**.....5: Smith & Nephew.

**Urish, Kenneth L** .....3B: Peptilogics.

**Vahidi, Ghazal**.....Disclosed no conflict of interest.

**Vail, Thomas** .....Disclosed no conflict of interest.

**van Arkel, Ewoud R.A.** .....Disclosed no conflict of interest.

**van Arkel, Richard J** .....Disclosed no conflict of interest.

**Van Citters, Douglas** .....3B: Medacta, Anika; 5: RevBio, DePuy Synthes, TJO, ConforMIS.

**Van de Velde, Samuel** .....Disclosed no conflict of interest.

**van der Meulen, Marjolein C. H.** .....Disclosed no conflict of interest.

**Van Dillen, Linda** .....Disclosed no conflict of interest.

**van Hoogstraten, Sanne** .....Disclosed no conflict of interest.

**Van Rietbergen, Bert** .....Disclosed no conflict of interest.

**van Wijnen, Andre** .....Disclosed no conflict of interest.

**Vandenberg, Nicholas W** .....Disclosed no conflict of interest.

**Varadarajan, Kartik** .....3A: Stryker Corp; 8: Visionairy Health.

**Varady, Nathan H** .....Disclosed no conflict of interest.

**Vargas-Vila, Mario A** .....Disclosed no conflict of interest.

**Varner, Amanda J** .....Disclosed no conflict of interest.

**Vashishth, Deepak** .....Disclosed no conflict of interest.

**Vasquez-Bolanos, Laura S** .....Disclosed no conflict of interest.

**Vater, Corina** .....Disclosed no conflict of interest.

**Vaughan, Ted J** .....Disclosed no conflict of interest.

**Vedadghavami, Armin** .....Disclosed no conflict of interest.

**Vega, Sebastian L** .....Disclosed no conflict of interest.

**Verhaegen, Filip** .....Disclosed no conflict of interest.

**Viles, Ethan** .....Disclosed no conflict of interest.

**Vincent, Graham** .....3A: Stryker.

**Visnes, Håvard** .....Disclosed no conflict of interest.

**von Toerne, Christine** .....Disclosed no conflict of interest.

**Vorrius, Brandon** .....Disclosed no conflict of interest.

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

**Vukelic, Sinisa** .....Disclosed no conflict of interest.

**Wach, Amanda** .....Disclosed no conflict of interest.

**Wachs, Rebecca A** .....Disclosed no conflict of interest.

**Wadhwa, Harsh** .....Disclosed no conflict of interest.

**Wagala, Nyaluma N**.....Disclosed no conflict of interest.

**Wagner, Diane**.....Disclosed no conflict of interest.

**Wai, Sun N** .....Disclosed no conflict of interest.

**Wakabayashi, Hiroki** .....Disclosed no conflict of interest.

**Walk, Remy**.....Disclosed no conflict of interest.

**Walk, Seth**.....Disclosed no conflict of interest.

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

**Wallace, Joseph** .....9: Orthopaedic Research Society Section Chair.

**Walsh, Conor** .....Disclosed no conflict of interest.

**Walter, Adam** .....Disclosed no conflict of interest.

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

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

**Wang, Dong** .....4: Dong is cofounder of Ensign Pharmaceutical.

**Wang, Fei** .....Disclosed no conflict of interest.

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

**Wang, Jinhua** .....Disclosed no conflict of interest.

**Wang, Junsig**.....Disclosed no conflict of interest.

**Wang, Kaidi**.....Disclosed no conflict of interest.

**Wang, Lai** .....Disclosed no conflict of interest.

**Wang, Tianbai**.....Disclosed no conflict of interest.

**Wang, William Y** .....Disclosed no conflict of interest.

**Wang, Xiaofang** .....Disclosed no conflict of interest.

**Wang, Yong**.....Disclosed no conflict of interest.

**Wang, Zexi** .....Disclosed no conflict of interest.

**Wanivenhaus, Florian** .....Disclosed no conflict of interest.

**Ward, Samuel R** .....Disclosed no conflict of interest.

**Warita, Takayuki** .....3A: TUNZ Pharma Co. Ltd.

**Warren, Russell** .....1: Arthrex.

**Warren, Russell F** .....1: Arthrex and Zimmer Biomet; 4: AGility Biomechanics, CyMedica Orthopedics, OrthoSensor, Stryker, Trice Medical, Zipline Medical.

**Warrick, Adam**.....Disclosed no conflict of interest.

**Wastvedt, Solveig**.....Disclosed no conflict of interest.

**Watanabe, Masahiko**.....Disclosed no conflict of interest.

**Watling, Jonathan** .....3B: Exactech, Inc.

**Watson, Steven L**.....Disclosed no conflict of interest.

**Weaver, Samantha R**.....Disclosed no conflict of interest.

**Weber, Eckhard** .....5: Novartis.

**Wegrzyn, Julien** .....1: Dedienne santé; 3B: Stryker, Lima corporate; 5: Stryker.

**Wei, Xin**.....Disclosed no conflict of interest.

**Wei, Yulong**.....Disclosed no conflict of interest.

**Wein, Marc N**.....5: MNW receives research funding from Radius Health and Galapagos NV.

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

**Weiser, Jennifer R**.....Disclosed no conflict of interest.

**Weiss, Arnold-Peter**.....Disclosed no conflict of interest.

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

**Weiss, Stephanie**.....Disclosed no conflict of interest.

**Welhaven, Hope**.....Disclosed no conflict of interest.

**Wellik, Deneen M**.....Disclosed no conflict of interest.

**Werner, Frederick W** .....4: Moximed; 9: Hand and Wrist Biomechanics International.

**Westendorf, Jennifer J** .....Disclosed no conflict of interest.

**Westermann, Robert W.** .....6: Smith and Nephew Education.

**Westrich, Geoffrey** .....3B: Ethicon, Exactech, Inc, Stryker; 7A: Exactech, Inc, Styker; 9: Eastern Orthopedic Association.

**Whichard, Chris**.....Disclosed no conflict of interest.

**Whitaker, Ross T**.....Disclosed no conflict of interest.

**White, Stephen E**.....3A: DePuy Synthes; 4: Johnson and Johnson.

**Whitney, Kaitie E**.....Disclosed no conflict of interest.

**Whitt, Joshua P**.....3A: Flexion Therapeutics, Inc; 4: Flexion Therapeutics, Inc.

**Wilder, Lauren**.....Disclosed no conflict of interest.

**Wilkinson, J Mark** .....5: Amgen Inc; 8: J Orthop Res, Bone Joint Res; 9: BORS, ORS, NJR, NICE.

**Wilkinson, J Mark** .....Disclosed no conflict of interest.

**Willett, Thomas** .....Disclosed no conflict of interest.

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

**Willey, Michael C.** .....Disclosed no conflict of interest.

**Williams, Ashley A** .....Disclosed no conflict of interest.

**Williams, Jack R.** .....Disclosed no conflict of interest.

**Williams, Jonathan** .....Disclosed no conflict of interest.

**Williams, Justin N** .....Disclosed no conflict of interest.

**Williams, Katherine** .....Disclosed no conflict of interest.

**Wimmer, Markus** .....Disclosed no conflict of interest.

**Winalski, Carl** .....3B: Siemens; 4: Pfizer; 8: Osteoarthritis and Cartilage, Skeletal Radiology.

**Winalski, Carl** .....4: Pfizer Inc, General Electric Company; 6: BioClinica, Inc, Medical Metrics, Inc., PAREXEL International Corporation, CartiHeal Ltd.

**Winders, Elizabeth A** .....Disclosed no conflict of interest.

**Windhagen, Henning** .....Disclosed no conflict of interest.

**Winkler, Philipp W.** .....Disclosed no conflict of interest.

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

**Wittstein, Jocelyn R** .....6: Arthrex, Prodigy Surgical, Aesculap Biologics.

**Wohlgemuth, Ross P** .....Disclosed no conflict of interest.

**Wolfe, Preston** .....Disclosed no conflict of interest.

**Wolfson, Julian** .....Disclosed no conflict of interest.

**Womack, Sydney J** .....Disclosed no conflict of interest.

**WONG, Ronald Man Yeung** .....Disclosed no conflict of interest.

**Wosinski, Pauline** .....Disclosed no conflict of interest.

**Wright, Melissa** .....Disclosed no conflict of interest.

**Wright, Timothy** .....5: Lima Corporate; 7A: Exactech, Inc, Lima, Mathys Ltd; 9: American Joint Replacement Reg, Orthopaedic Research and Education Foundation.

**Wu Martinez, Oliver** .....Disclosed no conflict of interest.

**Wu, Bin** .....Disclosed no conflict of interest.

**Wu, Chia-Lung** .....Disclosed no conflict of interest.

**Wu, Colleen** .....Disclosed no conflict of interest.

**Wu, Isabella T** .....Disclosed no conflict of interest.

**Wu, Meilun** .....Disclosed no conflict of interest.

**Wu, Tina** .....Disclosed no conflict of interest.

**Wu, Xiaobo** .....Disclosed no conflict of interest.

**Xia, Yunwei** .....Disclosed no conflict of interest.

**Xian, Cory** .....6: NHMRC Australia.

**Xiang, Justin** .....Disclosed no conflict of interest.

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

**Xiao, Li (Jasmine)** .....Disclosed no conflict of interest.

**Xiao, Michelle** .....Disclosed no conflict of interest.

**Xiao, Yao** .....Disclosed no conflict of interest.

**Xie, Emily** .....Disclosed no conflict of interest.

**Xing, Lianping** .....Disclosed no conflict of interest.

**Xing, Yuan** .....Disclosed no conflict of interest.

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

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

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

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

**Yahiro, Kenichiro** .....Disclosed no conflict of interest.

**Yakkanti, Madhusudhan** .....Disclosed no conflict of interest.

**Yamada, Katsuhisa** .....Disclosed no conflict of interest.

**Yamaguchi, Jonathan** .....Disclosed no conflict of interest.

**Yan, Mingming** .....Disclosed no conflict of interest.

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

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

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

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

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

**Yanik, Elizabeth** .....Disclosed no conflict of interest.

**Yao, Lutian** ..... *Disclosed no conflict of interest.*

**Yao, Zhenyu** ..... *Disclosed no conflict of interest.*

**Yeo, Ingwon** ..... *Disclosed no conflict of interest.*

**Yeritsyan, Diana** ..... *Disclosed no conflict of interest.*

**Yew, Andy** ..... *Disclosed no conflict of interest.*

**Yik, Jasper H.N.** ..... 4: Tesio Pharmaceutical.

**Yokota, Isao** ..... *Disclosed no conflict of interest.*

**Yokota, Shunichi** ..... *Disclosed no conflict of interest.*

**Yorgan, Timur** ..... *Disclosed no conflict of interest.*

**Yoshida, Masahito** ..... *Disclosed no conflict of interest.*

**Yoshikawa, Tomoya** ..... *Disclosed no conflict of interest.*

**Yoshioka, Natalie** ..... *Disclosed no conflict of interest.*

**Young, Nathan M.** ..... *Disclosed no conflict of interest.*

**Yousef, Mohamed** ..... *Disclosed no conflict of interest.*

**Yu, Elaine W.** ..... 4: Opko; 5: Amgen; 8: JBMR, Bone; 9: ASBMR.

**Yu, Kanglun** ..... *Disclosed no conflict of interest.*

**Yu, Kristin** ..... *Disclosed no conflict of interest.*

**Yu, Victoria** ..... *Disclosed no conflict of interest.*

**Yu, Wei** ..... *Disclosed no conflict of interest.*

**Yu, Yilin** ..... *Disclosed no conflict of interest.*

**Yuan, Huipin** ..... 3A: Kuros Biosciences BV; 4: Kuros Biosciences AG.

**Yun, Chawon** ..... *Disclosed no conflict of interest.*

**Zainul-Abidin, Suraya** ..... *Disclosed no conflict of interest.*

**Zarei, Milad** ..... *Disclosed no conflict of interest.*

**Zbyn, Stefan** ..... *Disclosed no conflict of interest.*

**Zelik, Karl E** ..... *Disclosed no conflict of interest.*

**Zenobi-Wong, Marcy** ..... *Disclosed no conflict of interest.*

**Zgonis, Miltiadis** ..... *Disclosed no conflict of interest.*

**Zgonis, Miltiadis H** ..... *Disclosed no conflict of interest.*

**Zhai, Yuankun** ..... *Disclosed no conflict of interest.*

**Zhang, Changli** .....Disclosed no conflict of interest.

**Zhang, Chenghao** .....Disclosed no conflict of interest.

**Zhang, Chenzhen** .....Disclosed no conflict of interest.

**Zhang, Guo-Fang** .....Disclosed no conflict of interest.

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

**Zhang, Hengwei** .....Disclosed no conflict of interest.

**Zhang, Hongmei** .....Disclosed no conflict of interest.

**Zhang, Hui** .....Disclosed no conflict of interest.

**Zhang, Jianing** .....Disclosed no conflict of interest.

**Zhang, Juncheng** .....Disclosed no conflict of interest.

**Zhang, Ling** .....Disclosed no conflict of interest.

**Zhang, Meng** .....Disclosed no conflict of interest.

**Zhang, Ning** .....Disclosed no conflict of interest.

**Zhang, Xinlin** .....4: Bone Biologics Inc./Bone Biologics Corp.

**Zhang, Xiping** .....Disclosed no conflict of interest.

**Zhang, Xiurui** .....Disclosed no conflict of interest.

**Zhang, Xueying** .....Disclosed no conflict of interest.

**Zhang, Ying** .....Disclosed no conflict of interest.

**Zhao, Gang** .....3A: Gang is employee of Ensign Pharmaceutical; 4: Gang claims equity positions in Ensign Pharmaceutical.

**Zhao, Hong** .....Disclosed no conflict of interest.

**Zheng, Guoxing** .....Disclosed no conflict of interest.

**Zheng, Hongjun** .....Disclosed no conflict of interest.

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**Zhou, Jiamin** .....Disclosed no conflict of interest.

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**Ziemnicki, David M** .....Disclosed no conflict of interest.

**Zike, Samuel** .....Disclosed no conflict of interest.

**Zimmer, Nicole E.** .....Disclosed no conflict of interest.

**Zimmermann, Elizabeth** ..... *Disclosed no conflict of interest.*

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

**Zlotnick, Hannah M** ..... *Disclosed no conflict of interest.*

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