PURPOSE: The purpose of this study was to identify the trends, frequency, and nature of industry sponsorship of plastic surgery research since the establishment of conflicts of interest (COI) reporting policies.

METHODS: We analyzed the frequency and types of self-reported COI in three major plastic surgery journals since the adoption of reporting policies in 2007. All original articles that were published in three major plastic surgery journals from 2008 to 2014 were included. The type of self-reported COI was characterized into the following categories: research or institutional support, royalties/stock options, consultant/employee, or miscellaneous funding. A multivariate regression analysis was performed to determine what study-specific variables increase the likelihood of COI being disclosed.

RESULTS: A total of 3722 articles met the inclusion criteria and were included in the analysis. The incidence of COI steadily decreased from 24% in 2009 to 9% in 2013. The types of COI also significantly changed from 2008 to 2013 (p < 0.001). In 2008, 71% and 17% of COI were categorized as research support and consultant/employee, respectively. However by 2013, 34% and 57% were categorized as research support and consultant/employee, respectively. A multivariate regression analysis revealed that article subspecialty topic was associated with disclosure COI (p < 0.0001).

CONCLUSION: If self-reporting of COI are assumed to be accurate, the number of surgeon-reported COI in plastic surgery declined overall. Our analysis also suggests that industry has steadily increased the number of consultancies rather than direct research support over this period.

P23.

WALKING ON SUNSHINE: CONTINUED SURVEILLANCE OF INDUSTRY’S PAYMENTS TO PLASTIC SURGEONS

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PURPOSE: The Physician Payment Sunshine Act (PPSA) is a government initiative requiring all biomedical companies to publicly disclose payments to physicians. There continues to be misinterpretation and a lack of awareness amongst plastic surgeons, the public, and the media regarding these financial transactions. The goal of this study is to evaluate changes in the PPSA data since its implementation in 2014.

METHODS: Using PPSA data (Jan 2014-Dec 2015), we studied and compared the distribution of non-research industry payments made to plastic surgeons nationally.

RESULTS: During the 2015 and 2014 fiscal years, industry paid $28,876,097 and $22,215,693, respectively, to ~6,500 plastic surgeons. In both fiscal years, ~25% of all plastic surgeons received <$100, ~50% between $100 and $999, ~15% between $1,000 and $9,999, 3.1% between $10,000- $99,999, and 0.4% in excess of $100,000. The four largest payment categories were: royalty or licensing fees ($7,626,632 to 280 individuals in 2015, $14,408,952 to 27 individuals in 2014); speaker fees ($4,985,035 to 350 individuals in 2015, $5,307,153 to 272 individuals in 2014); consulting fees ($3,404,913 to 360 individuals in 2015; $3,481,382 to 361 individuals in 2014); and meals ($2,652,261 to 6,585 individuals in 2015; $2,203,663 to 6,366 individuals).

CONCLUSION: During 2014–2015, ~75% of plastic surgeons received industry payments of <$1,000. The largest payment category was royalty and licensing fees, paid to <0.005%. Over the two-year period, our analysis revealed changes in payments amounts and types. Awareness and continued surveillance of the PPSA data are critical to better understand industry payments to plastic surgeons.

P24.

THE SAFETY OF PREOPERATIVE VERSUS POSTOPERATIVE ENOXAPARIN CHEMOPROPHYLAXIS IN AUTOLOGOUS MICROSURGICAL BREAST RECONSTRUCTION

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PURPOSE: The purpose of this study was to identify the trends, frequency, and nature of industry sponsorship of plastic surgery research since the establishment of conflicts of interest (COI) reporting policies.
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PURPOSE: Patients undergoing autologous breast reconstruction are at high risk of perioperative venous thromboembolic events (VTE). The efficacy of chemoprophylaxis in decreasing VTE is well established but the timing of chemoprophylaxis remains controversial. Many surgeons are reluctant to initiate preoperative chemoprophylaxis due to concerns of bleeding. We compare the incidence of bleeding following preoperative versus postoperative initiation of chemoprophylaxis in microvascular breast reconstruction.

METHODS: Patients undergoing autologous breast reconstruction from August 2010-July 2016 were reviewed. Initiation of chemoprophylaxis changed from postoperative to preoperative in 2013, dividing subjects into two groups. Patient demographics, comorbidities, and complications were reviewed.

RESULTS: A total of 196 patients (311 flaps) were included in the study (mean age 51.4, SD 4.9; mean BMI 26). A total of 105 patients (166 flaps) received preoperative enoxaparin 40mg while 91 patients (145 flaps) received postoperative chemoprophylaxis. A total of four patients required hematoma evacuation, overall incidence of 2.04%. Of these, no hematomas (0%) occurred in the preoperative chemoprophylaxis group (p=0.045). Six patients received blood transfusions; two in the preoperative group, and four in the postoperative group (1.9% vs 4.4%, p=0.419). There was a total of one flap failure and no documented VTE in all groups.

CONCLUSION: This study demonstrates that preoperative chemoprophylaxis can safely be used in patients undergoing microvascular breast reconstruction. The higher rate of bleeding in the postoperative group may be related to the onset of action of enoxaparin of 4–6 hours, which allows for intraoperative hemostasis in the preoperative group while possibly potentiating postoperative oozing when administered postoperatively.

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PURPOSE: Modern body armor, rapid evacuation and advanced combat casualty care have improved survival after catastrophic extremity and maxillofacial trauma. Vascularized composite allotransplantation (VCA) is a superior restorative option compared to traditional reconstruction in these complex injuries. To mitigate obligate reperfusion injury in VCA, we evaluate the efficacy of a novel normothermic hyperbaric oxygen warm ex-vivo perfusion strategy using hyperoxygenated Kidney Perfusion Solution (KPS) in a porcine VCA model.

METHODS: Gracilis myocutaneous flap autotransplants were performed heterotopically in the cervical area of Yorkshire swine. Group 1 (controls, n=5) flaps were perfused with cold KPS at 4ºC for three hours prior to transplant. Group 2 (experimental, n=5) flaps were perfused with hyper-oxygenated KPS for seven hours at 37ºC in a hyperbaric chamber at 3 atm before transplantation. Flaps were monitored daily for clinical evidence of viability and biopsied per protocol with an end point of 21 days. Histologic analysis was blinded.

RESULTS: Autotransplants remained viable at the 21 day end point. Histological evaluation revealed extensive diffuse evidence of necrosis in all controls (at 3 hours, cold static preservation) but flaps placed on hyperbaric ex-vivo perfusion support showed decreased histologic evidence of ischemic injury or necrosis ranging from rare to moderate.

CONCLUSION: Hyperbaric normothermic perfusion dramatically extends the viability of composite tissues ex-vivo. Injuries secondary to ischemia and cold preservation are mitigated. This technology has the potential to extend the window of time between procurement and transplantation in the growing field of Reconstructive Transplantation as well as solid organ transplants.

P25. HYBERBARIC NORMOTHERMIC PERFUSION MITIGATES REPERFUSION INJURY IN PORCINE VASCULAR COMPOSITE ALLOTRANSPLANTATION (VCA)