the marginal mandibular branch of the left facial nerve and the marginal mandibular branch of the right facial nerve. A CFNG was transplanted in 8 rats (designated the control group), a CFNG coated with an ASC suspension (1.5 × 10⁶ cells/1,000 ml) in 8 rats (a suspension group), and a CFNG wrapped in an ASC sheet (1.5 × 10⁶ cells/3.5-cm diameter dish) in 8 rats (a sheet group). Nerve regeneration was then compared histologically and physiologically between the groups.

**RESULTS:** The time to reinnervation, assessed by observing the rate of contraction of the vibrissae muscles using a facial palsy scoring system, was significantly shorter in the sheet group than in the other 2 groups. Evoked compound electromyography showed significantly higher amplitude in the sheet group (4.2 ± 1.3 mV) than in the suspension group (1.7 ± 1.2 mV) and the control group (1.6 ± 0.8 mV; P < 0.01). Toluidine blue staining showed that the number of myelinated fibers was significantly higher in the sheet group (2,455 ± 603) than in the suspension group (1,379 ± 793; P < 0.01). The time to contraction of the vibrissae muscles using a goniometer. In addition, silicone breast implants were explanted for histologic, immunohistochemical examination, and western blotting. BellGel Micro and Motiva SilkSurface textures resulted in significant decreases in capsule thickness (P < 0.05) and collagen production (P < 0.05) at 8 weeks with respect to the BellaGel Smooth and BellaGel Textured group. Fibrous tissue formation markers (Vimentin, α-SMA, and TGF-β) were significantly reduced in BellaGel Micro and Motiva SilkSurface textures with respect to the BellaGel Smooth and BellaGel Textured group. Significant (P < 0.05) decreases in inducible nitric oxide synthase, an inflammation marker, were observed in the BellaGel Micro and Motiva SilkSurface textures. In summary, surface texture with microtopographic features led to decreased fibrotic capsule formation compared with other surfaces. This finding may offer to design an improved silicone breast implant, which could alleviate capsular contracture.

**Searching for an Ideal Preclinical Model to Analyze Oncologic Safety of Breast Lipofilling: Preliminary Results**

**Presenter:** Francisco Claro, Jr, MD, PhD  
**Co-Authors:** Renato Pierre Lima, MS; Camila de Angelis, MD; Joseane Morare, PhD; Emerielle Vanzela, PhD; Wandir Antonio Schiozer, PhD; Luis Otavio Zanatta Sarian, PhD

**Affiliation:** State University of Campinas (UNICAMP), Campinas, Brazil

**INTRODUCTION:** Preclinical studies aiming to evaluate the microenvironment of breast cancer (BC) are very important for analysis of risk and the behavior of this disease to treatments proposed in humans, such as breast lipofilling. Laboratorial studies used so far for this purpose present serious methodologic problems. They are based on models that use cancer-induced carcinogens that have a residual systemic effect or through the use of nonluminal human BC implanted in immunosuppressed murine hosts. This article, although, presents preliminary results of a big project aiming to develop a preclinical studies capable of assessing risks. The primary objective here was to analyze the effectiveness of cafeteria diet (CD)—a known risk factor for BC in humans—to stimulate the mammary gland and the time required for this to trigger some effect over the murine breast tissue.

**METHODS:** Eighteen Sprague-Dawley rats with 28 days of life were randomly divided into 4 groups: 2 controls (C1 and C2), where rats were fed with standard diet, and 2 groups that received CD (D1 and D2). CD was introduced at rats’ age of 6 weeks, what is similar to the human age (HA) of 7 years old. The following variables were collected...