

Supplemental Table 1 Serum biomarker panel with rationale

Biomarker panel	Rationale
IL-1b, TNF-a	Proinflammatory, promote neutrophil infiltration
IL-2Ra, IP-10, MIG	Proinflammatory, involved in T cell immunity
IL-8, MCP-1, RANTES	Proinflammatory, involved in NF-kB pathway
PTX3	Activates complement, chemoattract
IFN-g	Proinflammatory, suppresses PTX3
IL-6	Pro- and anti-inflammatory, reduces generation of ROS
HIF-1a	Hypoxia-signaling, regulates cytokine expression

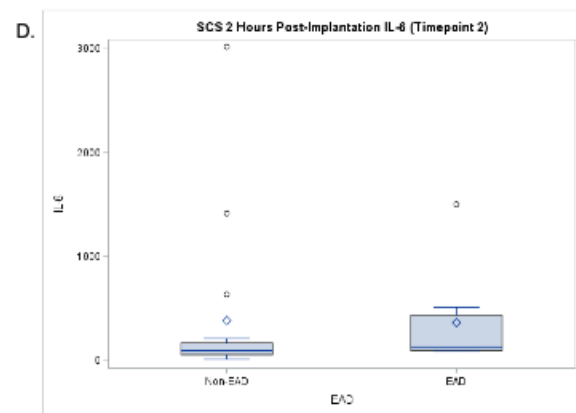
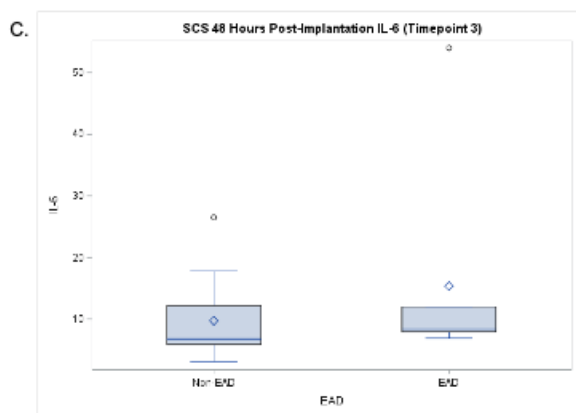
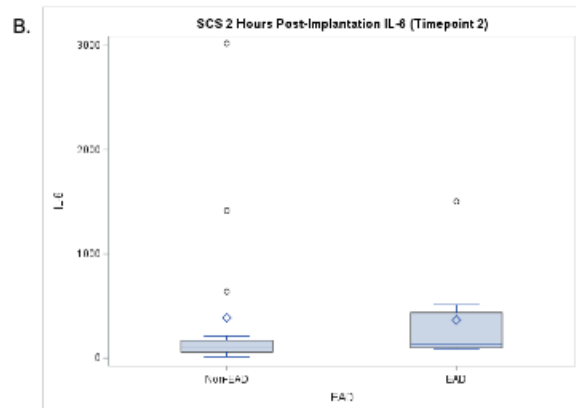
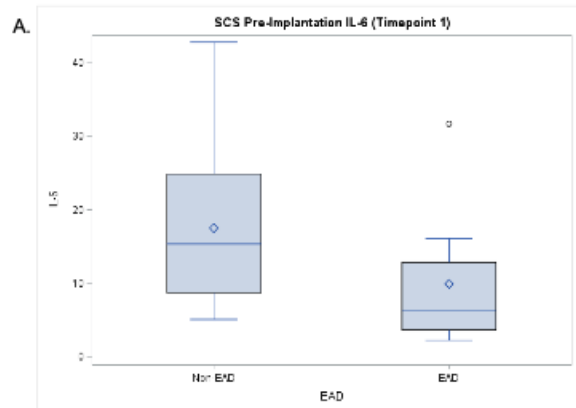
IL-1b indicates interleukin-1 beta; TNF-a, tumor necrosis factor alpha; IL-2Ra, interleukin-2 receptor alpha; IP-10, interferon gamma-induced protein 10; MIG, monokine induced by gamma interferon; MCP-1, monocyte chemoattractant protein-1; RANTES, regulated on activation, normal T cell expressed and secreted; PTX3, pentraxin-related protein 3; IFN-a, interferon-gamma; HIF-1 a, hypoxia-inducible factor-1 alpha.

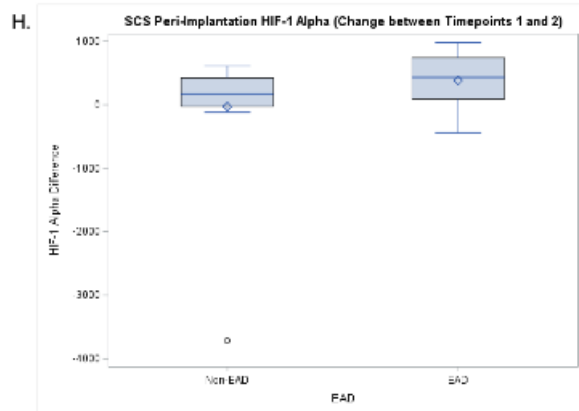
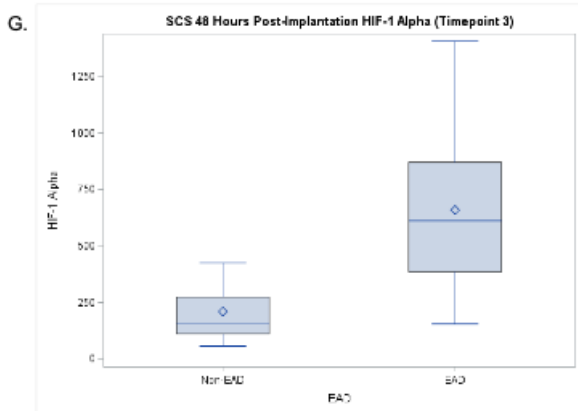
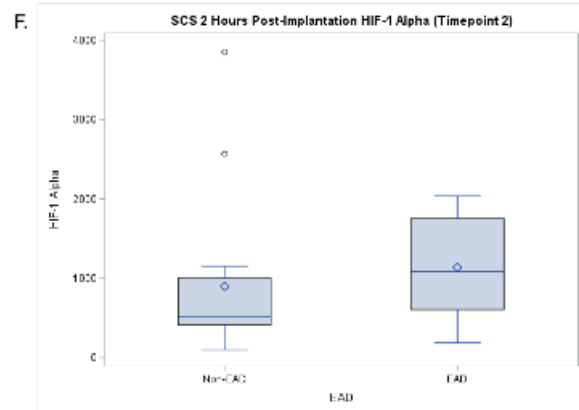
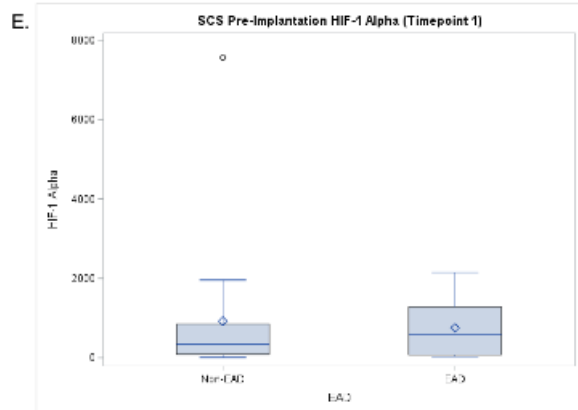
Supplemental Table 2 Predictive biomarkers and secondary outcomes

Biomarker	Timepoint	Secondary outcome	Spearman's correlation	P value
IL-6 (n=24)	T1 (Baseline)	Peak 7 day AST level	-0.51043	0.0108
		ICU LOS	0.24395	0.2506
		Hospital LOS	0.31738	0.1307
HIF-1a (n=16)	T3 (48-hours Post- implantation)	Peak 7 day AST level	0.55588	0.0254
		ICU LOS	0.33384	0.2063
		Hospital LOS	0.35008	0.1838

IP-10 (n=24)	T2-T1 (Peri- implantation)	Peak 7 day AST level	0.48174	0.0171
		ICU LOS	0.52649	0.0082
		Hospital LOS	0.39607	0.0554
IL-6 (n=24)	T1 (Baseline)	Post- operative	0.0000	0.9769
		AKI		
		Extubation in OR	0.8944	0.3554
		30-day mortality	0.2889	0.7180
HIF-1a (n=16)	T3 (48-hours Post- implantation)	Post- operative	-0.4234	0.6338
		AKI		
		Extubation in OR	-1.3128	0.1722
		30-day mortality	0.0000	0.9136
IP-10 (n=24)	T2-T1 (Peri- implantation)	Post- operative	1.2746	0.1924
		AKI		
		Extubation in OR	1.3118	0.1797
		30-day mortality	0.0000	0.9424

AST indicates aminotransferase; HIF-1a, hypoxia-inducible factor-1 alpha; ICU, intensive care unit; IL-6, interleukin-6; IP-10, interferon gamma-induced protein 10; LOS, length of stay.





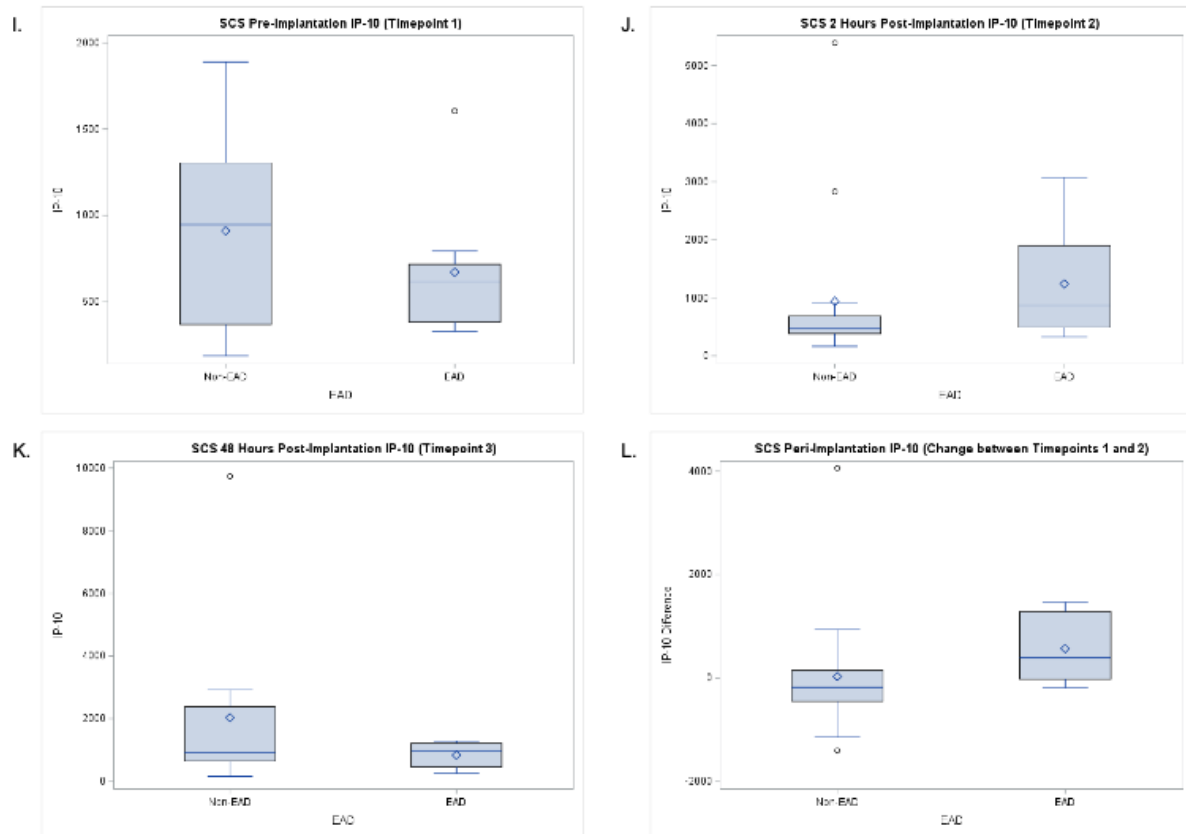


Figure 1 A-L. Boxplots comparing IL-6 (A-D), HIF-1a (E-H), and IP-10 (I-L) levels between non-EAD and EAD groups at each timepoint (T1, T2, and T3) and peri-implantation (T2-T1). HIF-1a, hypoxia inducible factor-1 alpha; IL-6 indicates interleukin-6; IP-10, interferon-gamma-inducible protein 10; SCS, static cold storage.