REPOSITORY FILE (PONE-D-20-21600)

TubeC+ group: A 20mm rat sciatic nerve deficit was bridged with a 23mm-long extratubularly vascularized PGA meshed tube containing chemically created decellularized allogenic basal nerve scaffold (DABL) and bone marrow derived mesenchymal stem cells (BMSCs) (in 0.075 ml of α-MEM solution at concentration of 3 x 10^6 cells/ml).

VDB group: A 20mm rat sciatic nerve deficit was bridged with a 23mm-long silicone tube (inner diameter; 3mm) containing a sural vessel pedicle, chemically created DABL and BMSCs (in 0.075 ml of α-MEM solution at concentration of 3 x 10^6 cells/ml).

Electrophysiological study

24W	*TubeC+*	*VBD*	*p*
Number	*8*	*8*	-
MNCV	0.58±0.15	0.64±0.12	n.s.
CMAP	0.58±0.15	0.60±0.18	n.s.

Histomorphometric study

24W	*TubeC+*	*VBD*	*p*
Number	*8*	*8*	-
Axon Number	4662±711	4850±908	n.s.
Axon Diameter (μm)	2.85±0.41	2.90±0.36	n.s.
Myelin Thickness (μm)	0.79±0.15	0.77±0.09	n.s.

Each value expresses the mean value ± standard deviation. The MNCVs and CMAP amplitudes were expressed as the ratios of those of the contralateral healthy limbs. n.s.: p.>0.05