

➤ General data

1	Title	
2	First author	
3	Year of publication	
4	Reviewer	

➤ Methods:

	Domain	Description	Reviewers' judgment High risk/ low risk/ unclear ¹
1	Fish strain		
2	Fish species		
3	Fish gender		
4	Number of fishes per group		
5	Genetic background		
6	Sample size		
7	Follow up period		
8	Age or weight (at the beginning and the end of the experiment)		
9	Method of allocation to treatment group: i.e. randomly assigning animals to a specific group		
10	Blindness of assessor		
11	Description of the method of injury		
12	Description of the severity of injury		

¹**Low risk:** no bias; **Unclear risk:** not mentioned; **High risk:** bias

13	Description of the level of injury		
14	Regulations and ethics		
15	Description of statistical analysis of data		
16	Using of appropriate tests to prove the research question and hypothesis		
17	Definition of the control group		
18	Method and drugs used for anesthesia/antibiotics		
19	Bladder expression		
20	Method of killing		
21	Experimental unit		
22	Housing conditions		
23	Exclusion of animals from the experiment		

➤ Results

Primary Outcome – Micro

Outcome measures		Time	Events
PO1: Expression of growth related molecules	Expression of growth –promoting molecules	mRN A	Protein
		L1.1, L1.2	
		GAP-43	
		NCAM	
		ZFNLR	
		HMGB1	
		SOX1	
		Contactin-1	
		Ptnea Ptena	
		CRP1	

		Legumain			
		SOX2			
		MVP			
		PO (protein zero)			
		MiR-133b			
	Expression of inhibitory molecules	mRNA	Protein		
		Nogo-A			
		Notch-her 1			
		LPA (lipopolysacharid acid)			
		Pten <u>Pten</u>			
	Expression of axonal guidance cues	Robo1,2,Slit3,Sema3,b,Sema3h,Plexina,mmp9,...etc			
	PO2:Neurons	Degeneration	Apoptosis		
			Necrosis		
			Loss/death		
		Regeneration/neurogenesis (type of neurons; motor, sensory, interneuron...etc)			
Synaptic formation					
Neurite sprouting/growth					
Axonal changes		Number(total, regenerated)			
		Remyelination			
		Repatterning			
		Pathway			
Escape behavior of growth cone					
Proliferation					
PO3 : Supportive Cells	Astrocyte	Morphology	Glial bridge formation		
			Typical morphology		

		Apoptosis/necrosis/ death		
		Proliferation		
		Migration (infiltration)		
		Reactivity		
		Differentiation to neurons (progenitor cell)		
	Oligodendrocyte	Apoptosis/necrosis/ death		
		Proliferation		
		Migration (infiltration)		
		Reactivity/morphology		
	Schwann	Apoptosis/necrosis/ death		
		Proliferation		
		Migration (infiltration)		
		Morphology		
	Microglia/macrophage	Apoptosis/necrosis/ death		
		Proliferation		
		Migration (infiltration)		
		Reactivity/ Morphology		
	Ependyma	Apoptosis/necrosis/ death		
		Proliferation		
		Migration		
Reactivity/ Morphology				
Differentiation to neurons (progenitor cell)				

PO4: Functional recovery (swimming)			
-------------------------------------	--	--	--

Secondary Outcome – Macro

Outcome measures		time	Events
S01	Hemorrhage/ spinal cord blood flow		
S02	Edema (Gray matter, white matter)		
S03	Vasospasm / Blood-Spinal_Cord-Barrier rupture		
S04	Necrosis/ thrombosis/ infraction		
S05	Regeneration		
S06	Gliosis/ scar formation		
S07	Degeneration/tissue loss		
S08	Injury volume / atrophy		

➤ Note:

1	Molecular (name, place of expression, its effectiveness etc...)	
2	Cellular (type, position and effectiveness)	
3	Position of recovery in spinal cord	
4	Direction of recovery (e.g. caudal, rostral, ...)	
5	inhibitory or activation mechanism of molecule or cell	
6	Model of recovery evaluation such as cellular, immunohistochemistry, molecular (PCR), physical activity (swimming)	

*Limitations of the study