

Additional Table 1 Surgical Site Infection Criteria

SSI Type	Time to event (days)	Depth of infection	patient has at least one of the following:	Required treatment
SSI-S	<30	Skin or subcutaneous tissue of the incision	Purulent drainage	local anesthesia for debridement
			Positive culture	
SSI-D	<90	deep soft tissues , fascia and/or muscle of the incision	Purulent drainage	general anesthesia for thorough debridement
			Positive culture	
SSI-OS	<90	organ or space infections, such as osteomyelitis, meningitis, ventriculitis, abscess	Positive culture	Antibiotic Treatment
				Lumbar-drainage
			Images suggesting infection	general anesthesia for thorough debridement
				bone flap removal

Additional Table 2 Predictive value of BMI, duration of surgery and the combination of them for SSI

	Optimum Cut-Off value	AUC	95% CI	Sensitivity (%)	Specificity (%)
BMI	24.36	0.67	0.54-0.79	64.52	66.13
Duration of Surgery	4.465	0.71	0.6-0.82	54.84	75.81
combination	30.93	0.75	0.65-0.86	72.58	70.97

Additional Table 3 Treatment of Surgical site infection

	SSI-S	SSI-D	SSI-OS
Case	3	5	23
antibiotic treatment	-	-	9
antibiotic treatment +Lumbar-drainage	-	-	6
local anesthesia for debridement	3	-	-
general anesthesia for thorough debridement	-	5	1
bone flap removal due to osteomyelitis	-	-	7
Readmission due to SSI	1	4	5
Date of event for infection occurs			
Mean	8.7	47.6	10.5
Median	10	55	6
Range	5-11	11-89	2-83
Day for SSI treatment			
Mean	16.3	22.6	25.7
Median	14	22	19
Range	12-23	18-31	9-92