

Supporting Information for

Biomechanical Study between the Rigid and Dynamic Fixation Systems of the Spinal Column Analyzed by the Finite Element Method

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Table S1 Material properties used in the FE model

| Material | Young modulus E (MPa) | Poisson coefficient | Elements | Noeuds |
|-----------------------------------------------|--------------------------|------------------------|----------|---------|
| Model intact | (Table 1) | (Table 1) | 199,689 | 32,7621 |
| B Dyne implant | | | | |
| Piston rod, cylindrical body and fixed rod | 112,400 | 0.34 | | |
| Ring and damper block | 600 | 0.49 | 228,348 | 378,676 |
| Pedicle screws TA6VELi | 112,400 | 0.34 | | |
| Elaspine implant | | | | |
| Two rods (silicone) | 600 | 0.49 | | |
| | | | 223,950 | 373,025 |
| Pedicle screws (Ti6Al4V ISO 5832-3) | 113,000 | 0.3 | | |
| Bioflex implant | | | | |
| Two springs (Ti-6Al-4V) | 113,000 | 0.3 | | |
| Pedicle screws (Ti6Al4V) | 113,000 | 0.3 | 228,101 | 399,240 |
| Coflex rivet | 113,000 | 0.3 | | |
| Pedicle screws (Ti6Al4V) | 113,000 | 0.3 | 202,615 | 332,396 |
| Pedicle screw fixation | | | | |
| Two rods (Ti6Al4V) | 113,000 | 0.3 | | |
| pedicle screws (Ti6Al4V) | 113,000 | 0.3 | 225,769 | 394,288 |