

TABLE E-1 Specific Primers Sequence

| Gene | Annealing Temperature | Application of Primer | Forward and Reverse Primers (5'→ 3') |
|--------------------------------------|-----------------------|-----------------------|--------------------------------------|
| Alkaline phosphatase | 50.0°C | Forward | ACG TGG CTA AGA ATG TCA |
| | 51.0°C | Reverse | CTG GTA GGC GAT GTC CTT A |
| Macrophage colony-stimulating factor | 50.0°C | Forward | CTG ACC AGC TCA GAG AGA |
| | 44.0°C | Reverse | CTC ATC AAT GTG CAG GA |
| Osterix/Sp7-s | 55.0°C | Forward | CAG GTT CCC CCA GGA GGA |
| | 58.0°C | Reverse | AGT CCC GCA GAG GGC TAG AG |
| Osterix/Sp7-l | 56.0°C | Forward | TCC TCC CTG CTT GAG GAG GA |
| | 58.0°C | Reverse | AGT CCC GCA GAG GGC TAG AG |

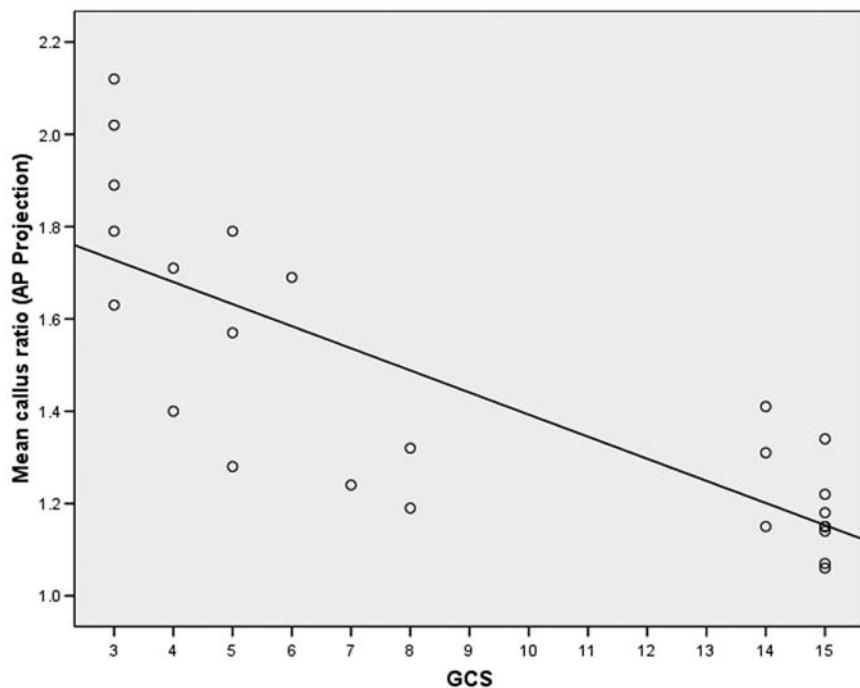


Fig. E-1A

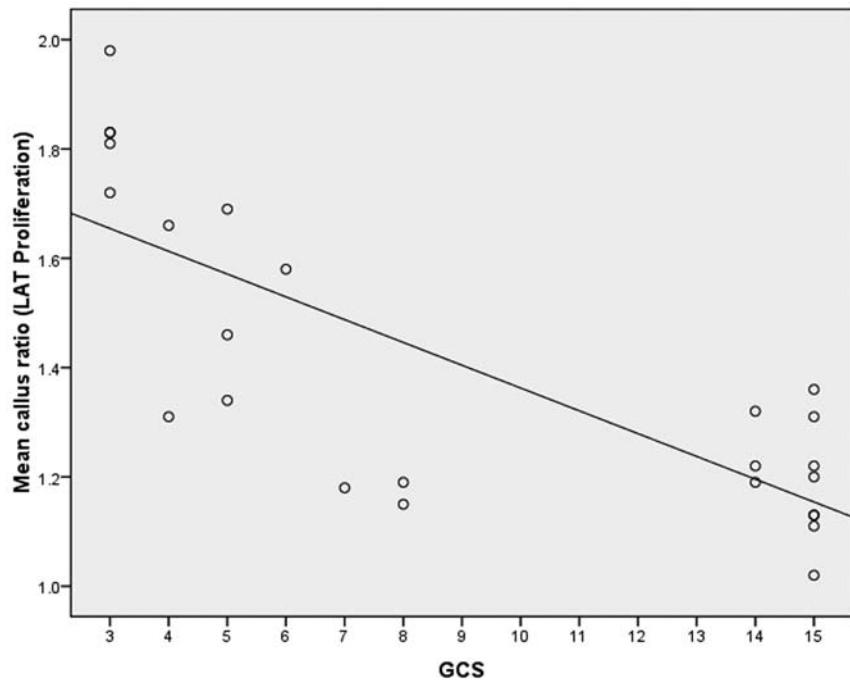


Fig. E-1B

Correlation between the Glasgow Coma Scale score (GCS) and the mean callus ratio of the maximal callus to diaphysis diameter adjacent to the fracture site on anteroposterior (Fig. E-1A) radiographs ($r = -0.55, p < 0.05$) and lateral (Fig. E-1B) radiographs ($r = -0.58, p < 0.05$). AP = anteroposterior, and LAT = lateral.

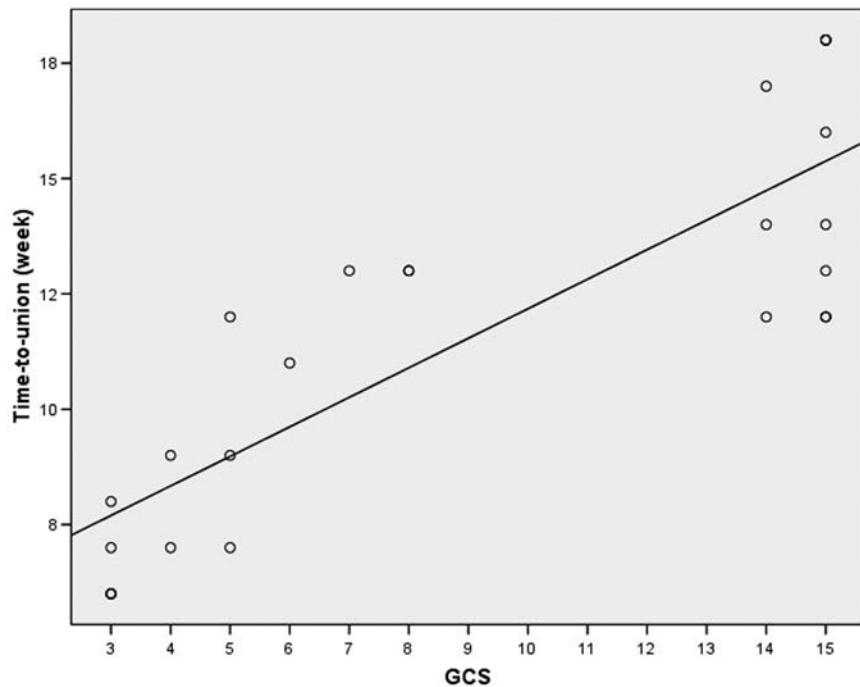


Fig. E-2

Correlation between Glasgow Coma Scale score (GCS) and time to union of the femoral fracture ($r = 0.67$, $p = 0.04$).

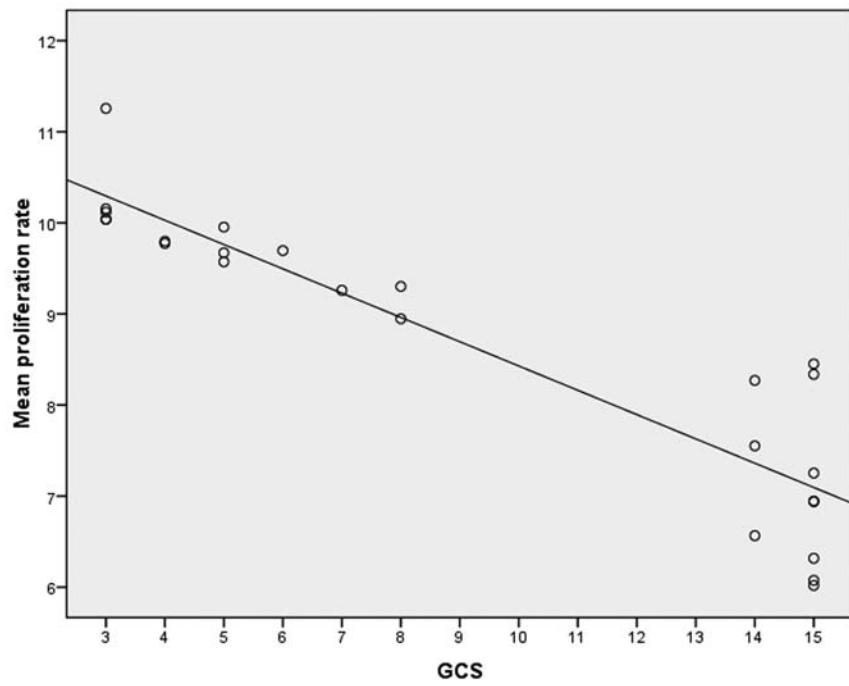


Fig. E-3

Correlation between Glasgow Coma Scale score (GCS) and mean proliferation rates of hFOB cells at six hours after injury ($r = -0.76$, $p = 0.03$).