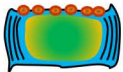


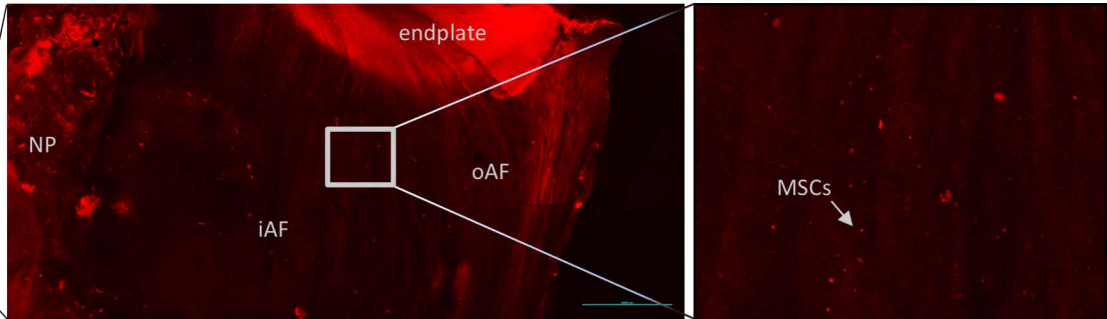
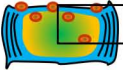
Supplementary Table 1 – Fraction of proliferating disc cells as % (Table, Fig. 7)

| IVD tissue | Donor # | Flow cytometry | | | IHC | | |
|--------------|---------|----------------|---------|-------------|------|---------|-------------|
| | | ctrl | treated | fold change | ctrl | treated | fold change |
| healthy | hD#1 | - | - | - | 16.6 | 26.0 | 1.5 |
| | hD#2 | 2.9 | 1.5 | 0.5 | 15.5 | 10.4 | 0.6 |
| | hD#3 | 1.5 | 2.7 | 1.8 | 3.1 | 9.2 | 2.9 |
| trauma | hD#4 | 0.2 | 0.3 | 1.5 | - | - | - |
| | hD#7 | 1.6 | 3.0 | 1.8 | - | - | - |
| degenerative | hD#8 | 0.2 | 0.5 | 2.5 | - | - | - |
| | hD#10 | 0.3 | 2.6 | 8.6 | - | - | - |

MSCs
(3×10^6 , PKH26)



5d



a

| Patient ID | Age | Sex | Level | Pathology |
|------------|-----|-----|-----------|-----------|
| MSC#1 | 51 | M | L5 | trauma |
| MSC#2 | 77 | M | L3 | trauma |
| MSC#3 | 78 | F | Th8 | trauma |
| MSC#4 | 63 | M | Th11 + L1 | trauma |
| MSC#5 | 52 | M | TH11 + L1 | trauma |
| MSC#6 | 50 | M | L4 | trauma |
| MSC#7 | 63 | M | L1 | trauma |
| MSC#8 | 65 | M | L3+ L5 | trauma |
| MSC#9 | 67 | M | Th7+Th9 | trauma |

b

| Patient ID | Age | Sex | Level | Pathology | MSC# used |
|------------|-----|-----|---------|--------------|-----------|
| hD#1 | 31 | M | L3-4 | healthy | MSC#9 |
| hD#2 | 54 | M | Th12-L1 | healthy | MSC#9 |
| hD#3 | 63 | M | L2-3 | healthy | MSC#9 |
| hD#4 | 72 | M | L4-5 | trauma | MSC#9 |
| hD#5 | 81 | F | L2-3 | trauma | MSC#1 |
| hD#6 | 26 | M | Th12-L1 | trauma | MSC#1 |
| hD#7 | 35 | M | L1-2 | trauma | MSC#2 |
| hD#8 | 69 | M | L2-3 | degenerative | MSC#9 |
| hD#9 | 69 | F | L3-4 | degenerative | MSC#1 |
| hD#10 | 75 | M | L4-5 | degenerative | MSC#2 |