

Figure S1. Representative filtered (250 Hz corner, 4th order Butterworth, high-pass) high speed recordings from each implanted carbon fiber at day 1 post-operatively.

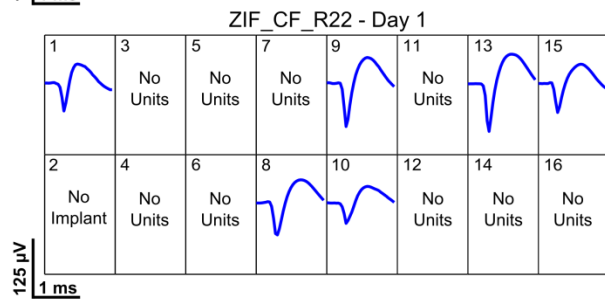
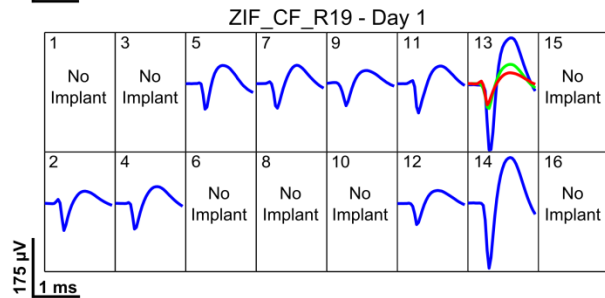
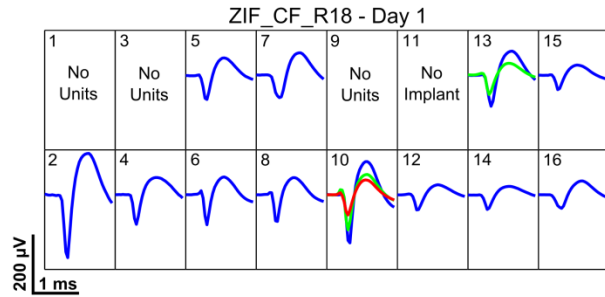
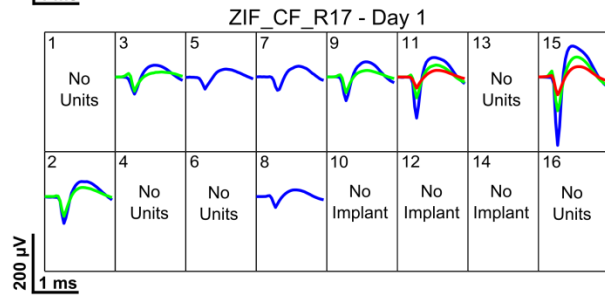
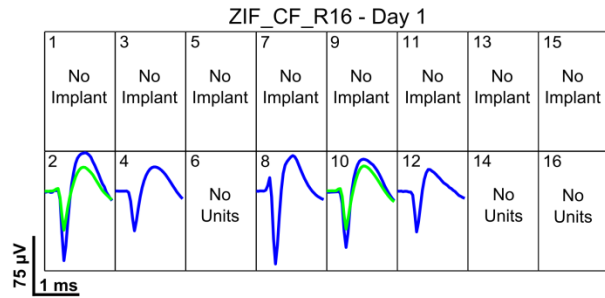


Figure S2. Average waveforms of sorted units detected on each implanted site at day 1 post-operatively.

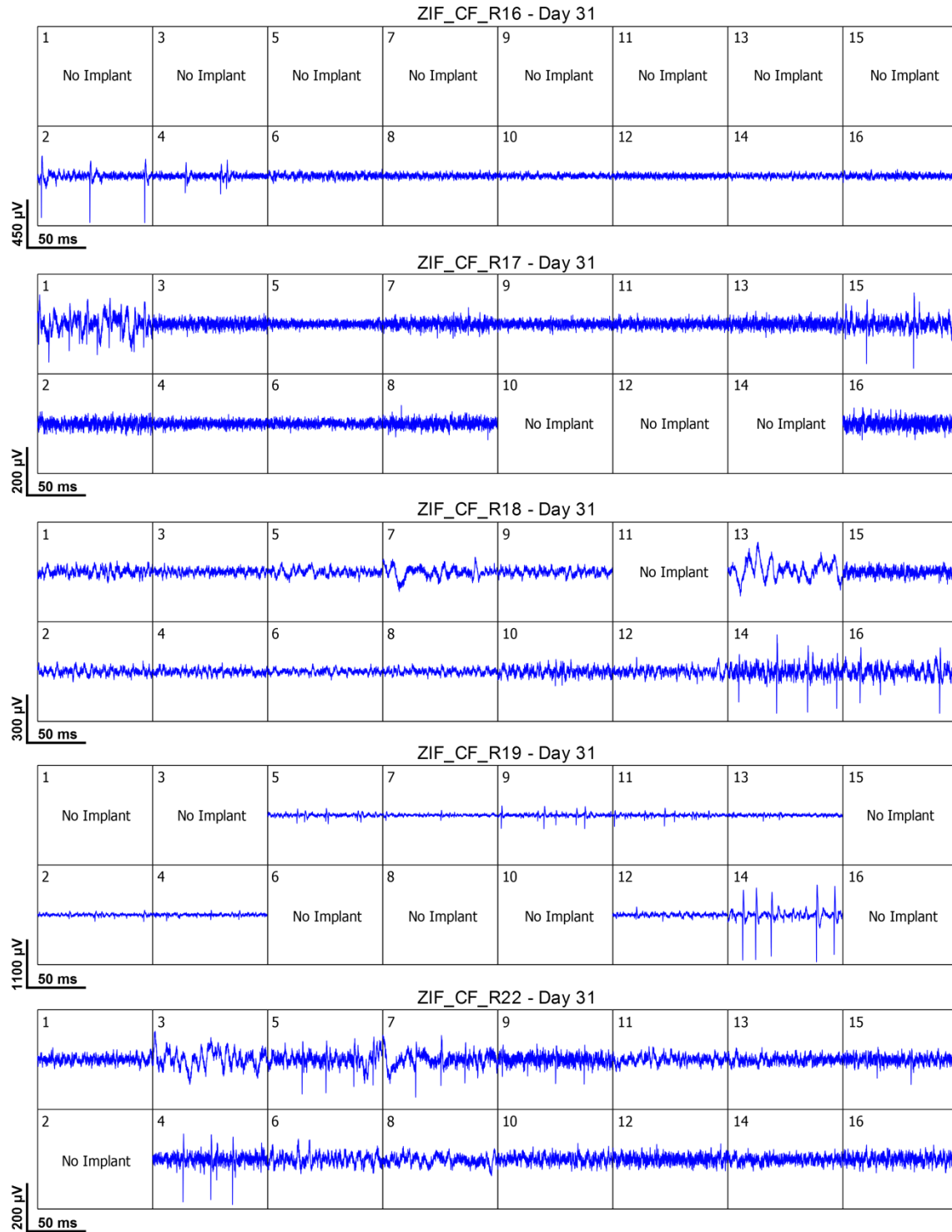


Figure S3. Representative filtered (250 Hz corner, 4th order Butterworth, high-pass) high speed recordings from each implanted carbon fiber at day 31 post-operatively.

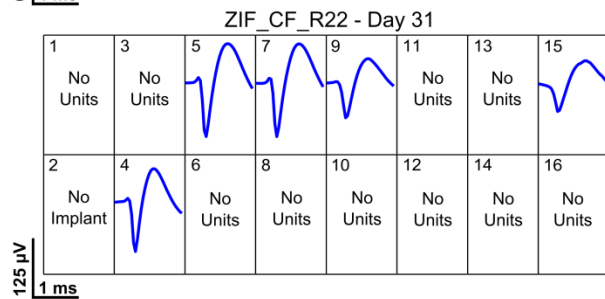
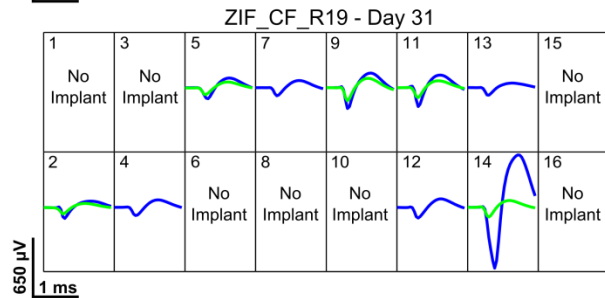
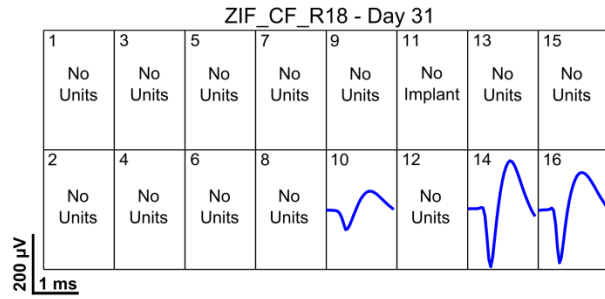
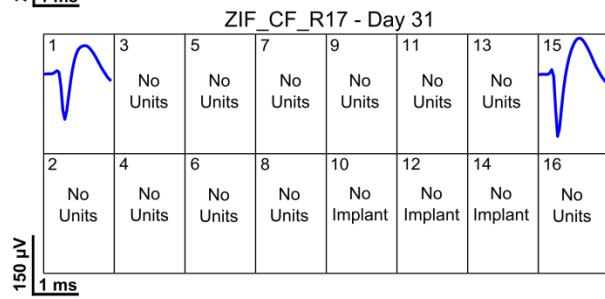
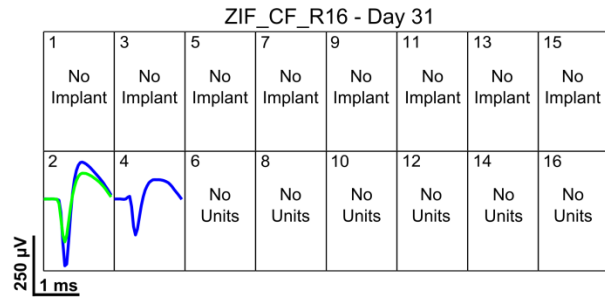


Figure S4. Average waveforms of sorted units detected on each implanted site at day 31 post-operatively.