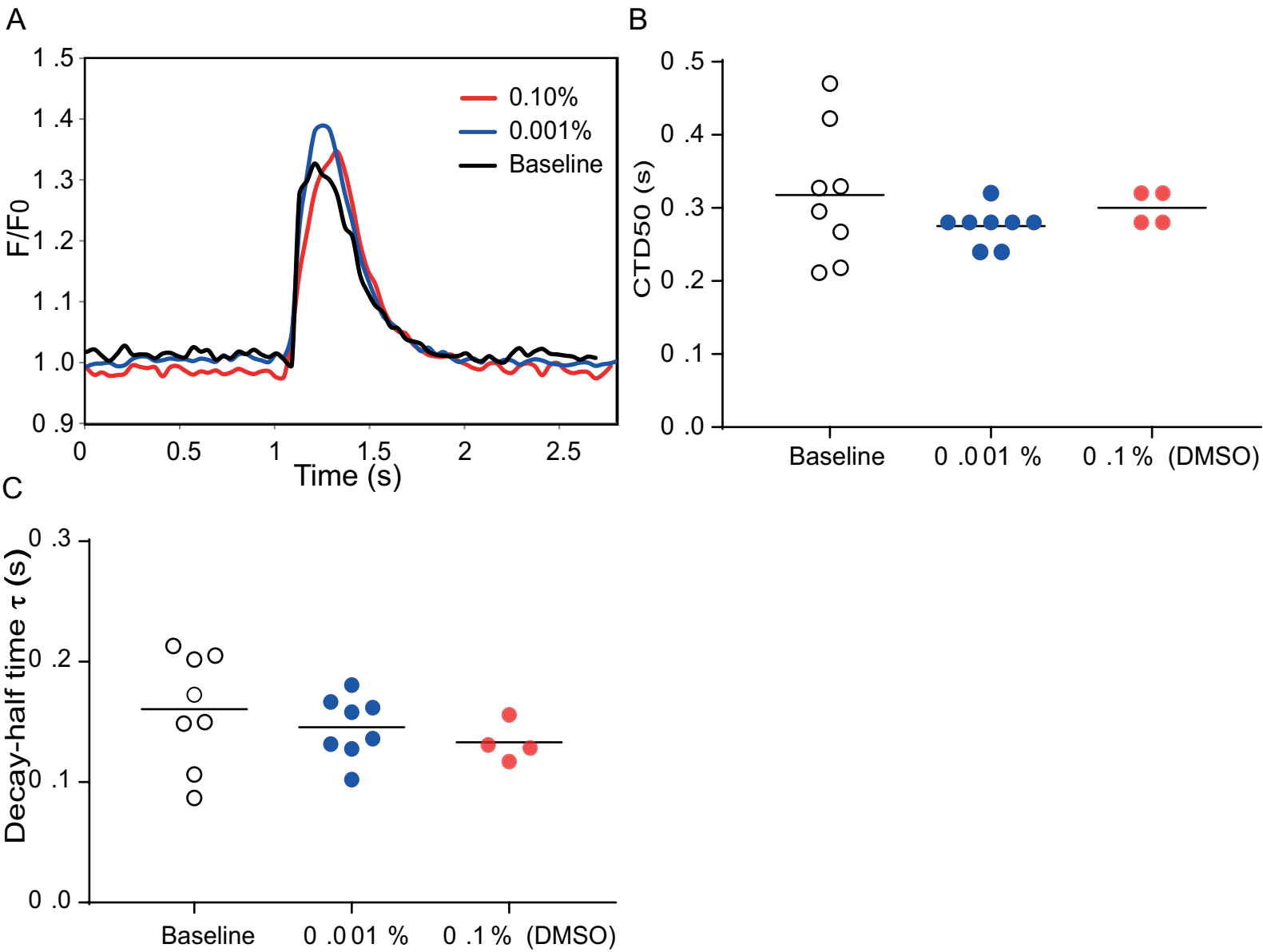Supplementary 5