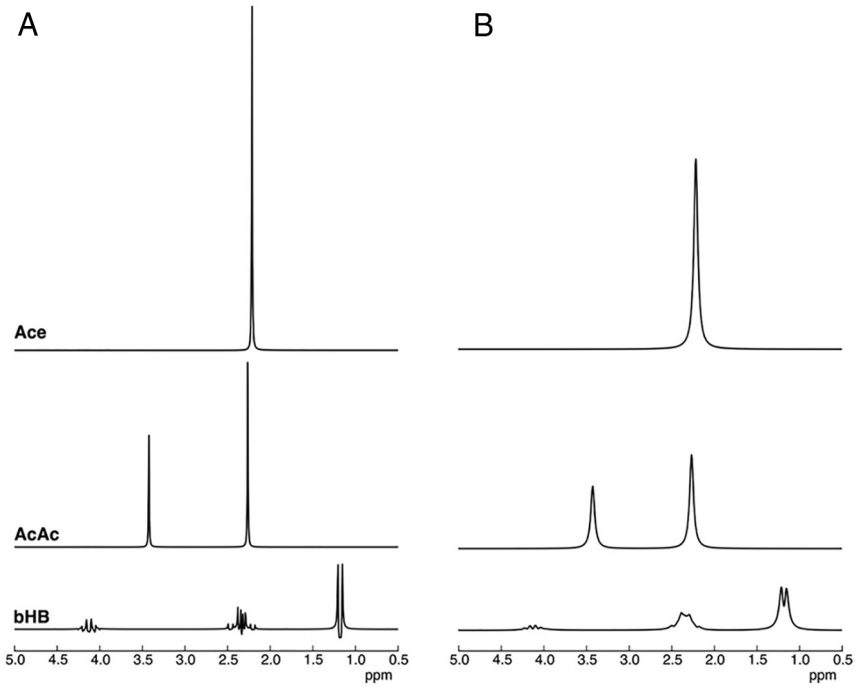
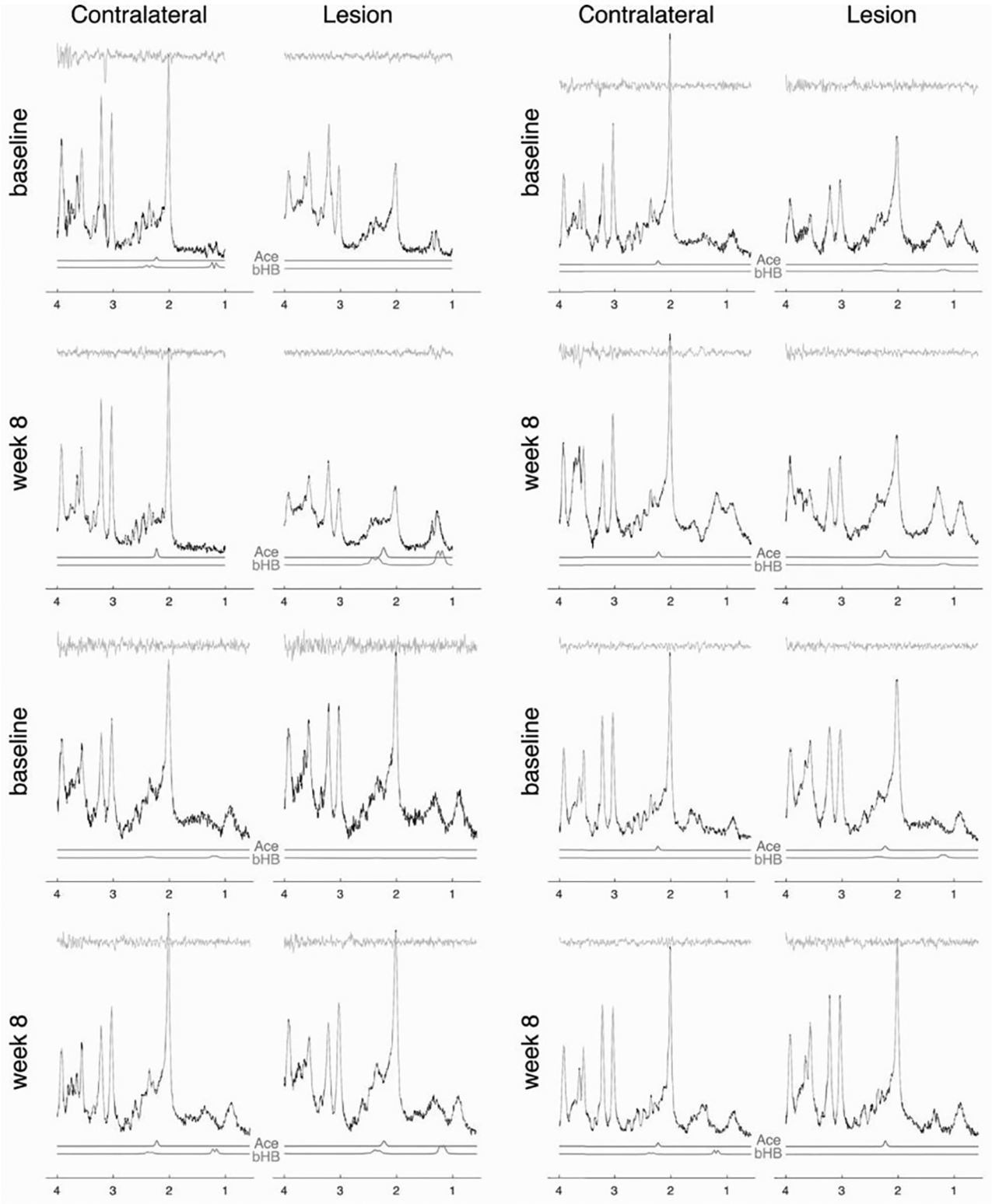
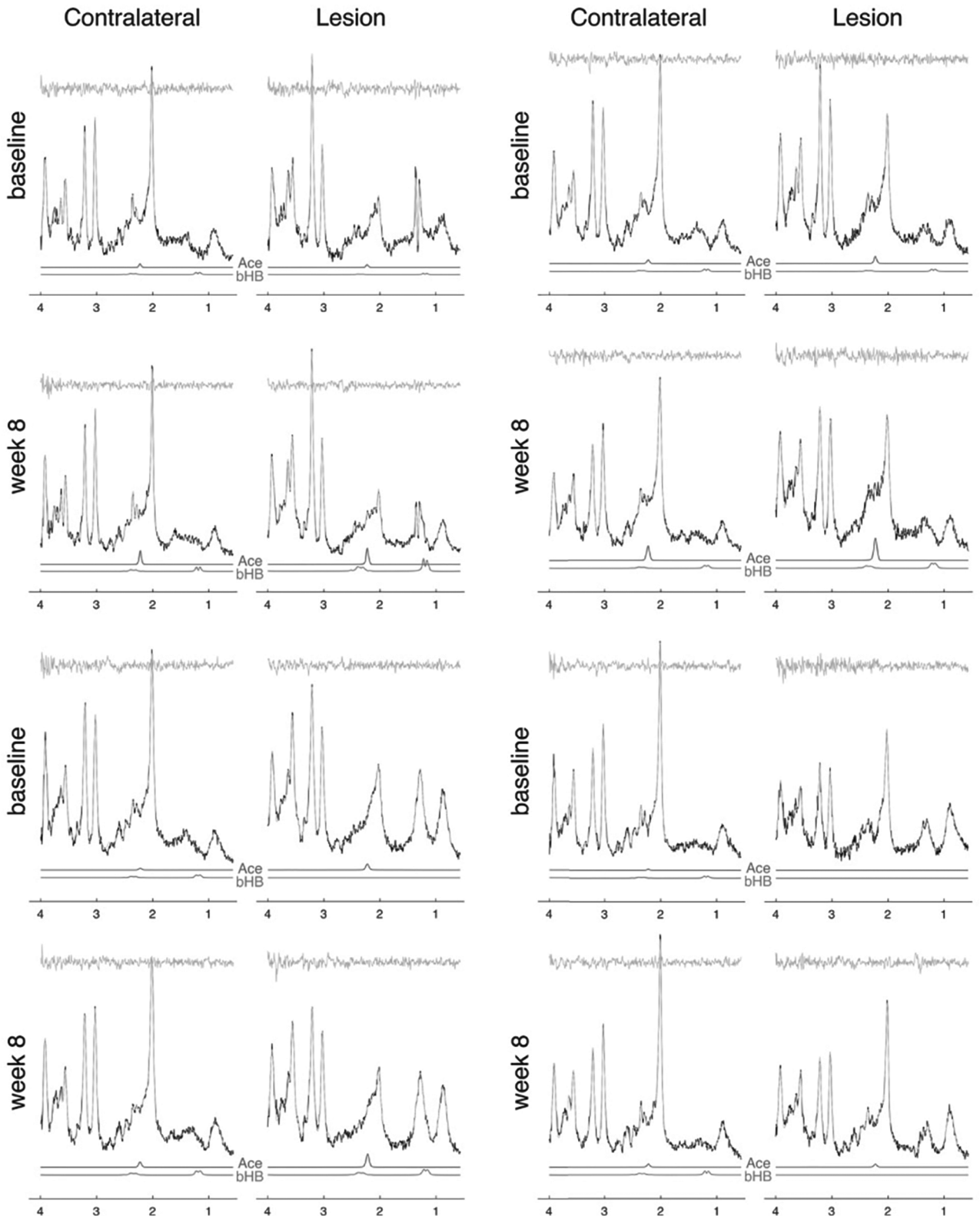


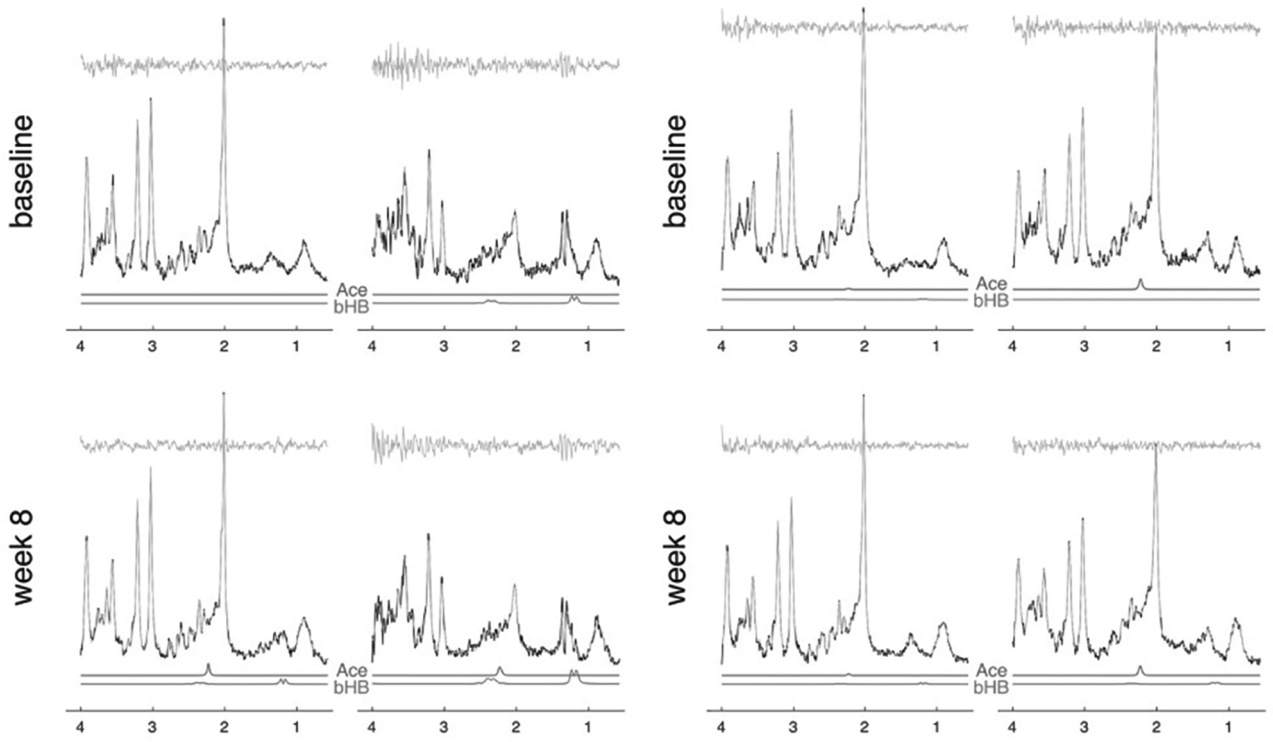
ON-LINE FIG 1. Simulated basis spectra (at *A*, 1-Hz line width. *B*, 6- Hz line width) used for fitting ketone bodies AcAc, Ace, and bHB, which were incorporated into LCModel fitting. Simulations are for a semi-LASER acquisition with TE = 34 ms.



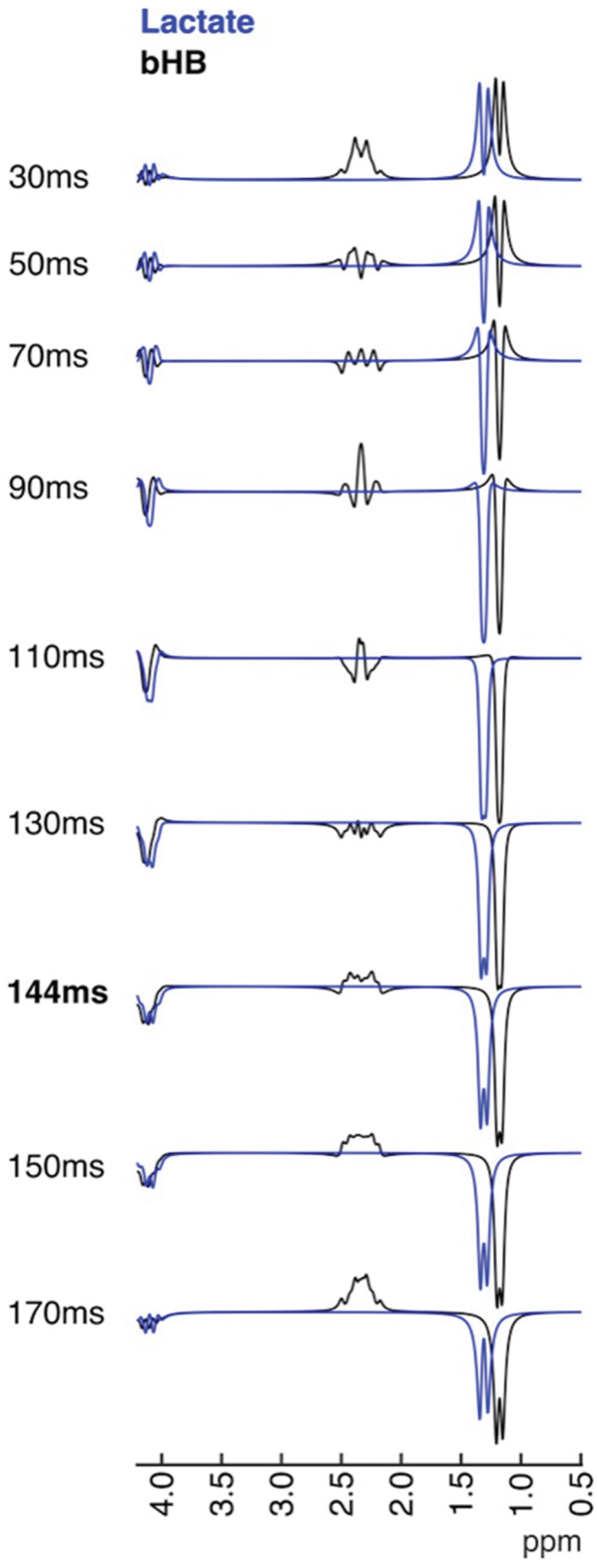
ON-LINE FIG 2. Patient spectra.



ON-LINE FIG 2. continued



ON-LINE FIG 2. continued



ON-LINE FIG 3. Simulated spectral patterns for equimolar concentrations of lactate and bHB at varying TEs (30–170 ms), neglecting T2 decay. The methyl groups in bHB and Lac behave very similarly as a function of TE, given the J–coupling constants of 6.3 and 6.94 Hz, respectively. There is no optimum TE to separate bHB and Lac; however, they are resolvable at 3T with the 6-Hz Lorentzian line widths shown here. Simulations were performed using an ideal point-resolved spectroscopic sequence localization; 144 ms indicates the TE commonly used for detection of lactate.