



**Figure 2. Ripple Propagation on Virtual Sensors (VS) and Predictive Value for Surgical Outcome.** **A).** Examples of ripple propagation on MEG-VSs (top) and EEG-VSs (bottom). Each scenario shows a ripple propagation in: (i) the time domain (left), where ripples are seen on adjacent VSs with a certain temporal latency from the onset (red dash line). VSs showing *onset-ripples*, i.e. within 10 ms from the onset, are highlighted in blue (LF18-LF33 on top; LA42 -OS6 at the bottom); (ii) the time-frequency domain (middle), where ripples are seen as an island in the spectral content within the ripple frequency band (80-200 Hz); and (iii) the spatiotemporal domain (right), where the VSs involved in the propagation are displayed on the patient’s MRI and color coded by their temporal latency from the onset. **B)** Confusion matrices for the prediction of the patient’s outcome based on the resection of the ripple-zone or onset-ripple zone, for MEG and and EEG. Resection of onset-ripple-zone shows higher positive predictive value (PPV) and negative predictive value (NPV) for both modalities.