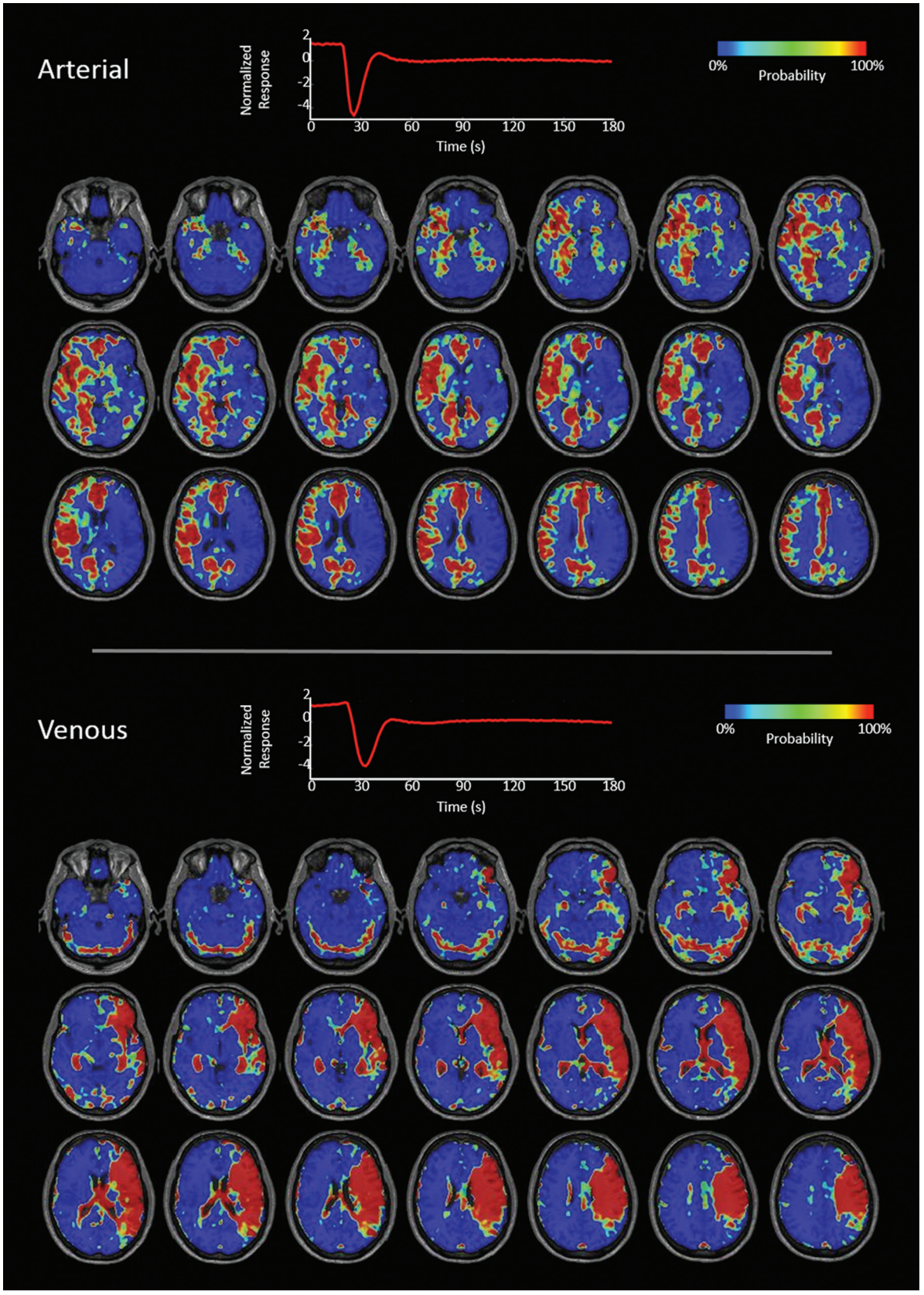
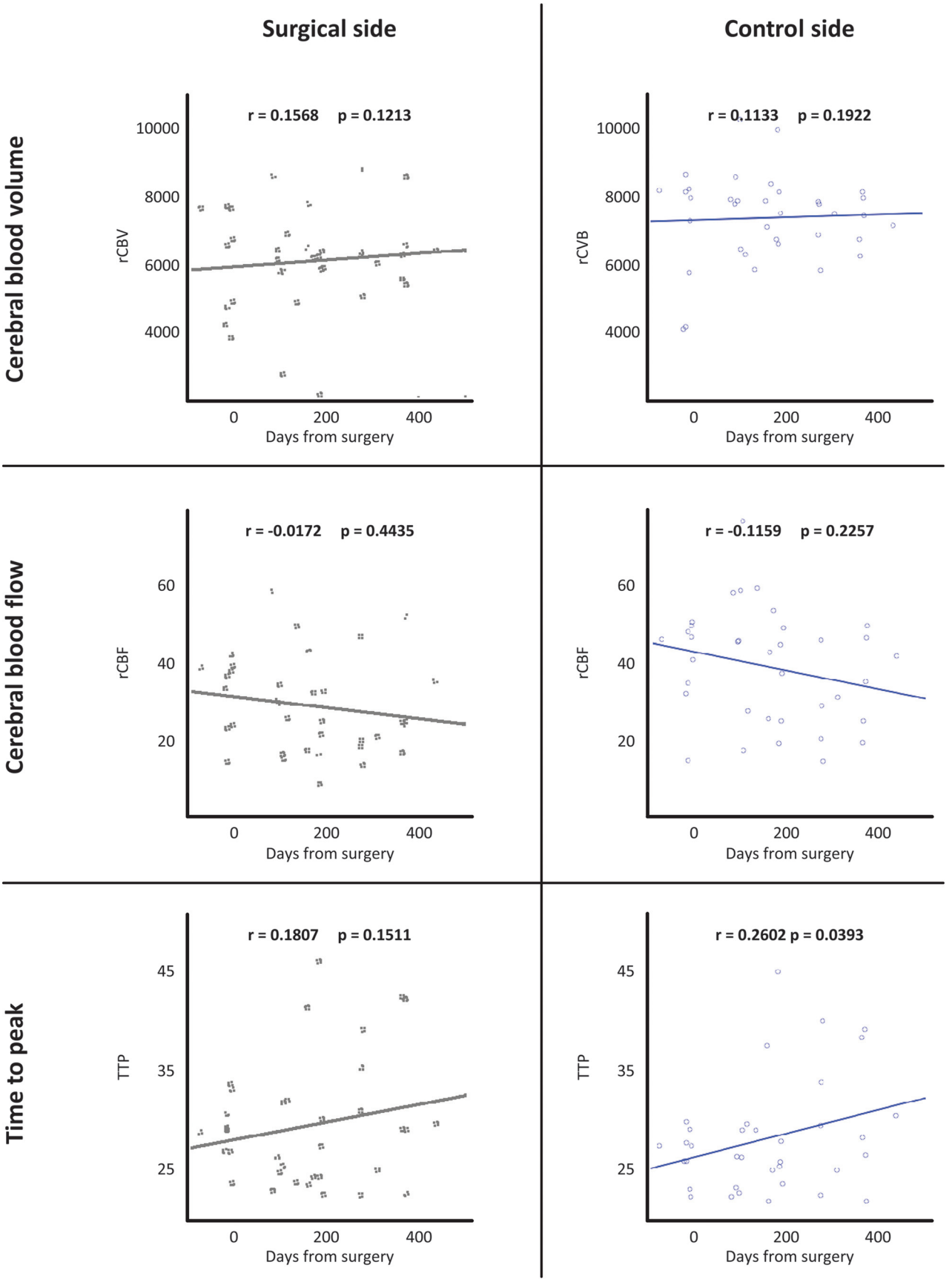
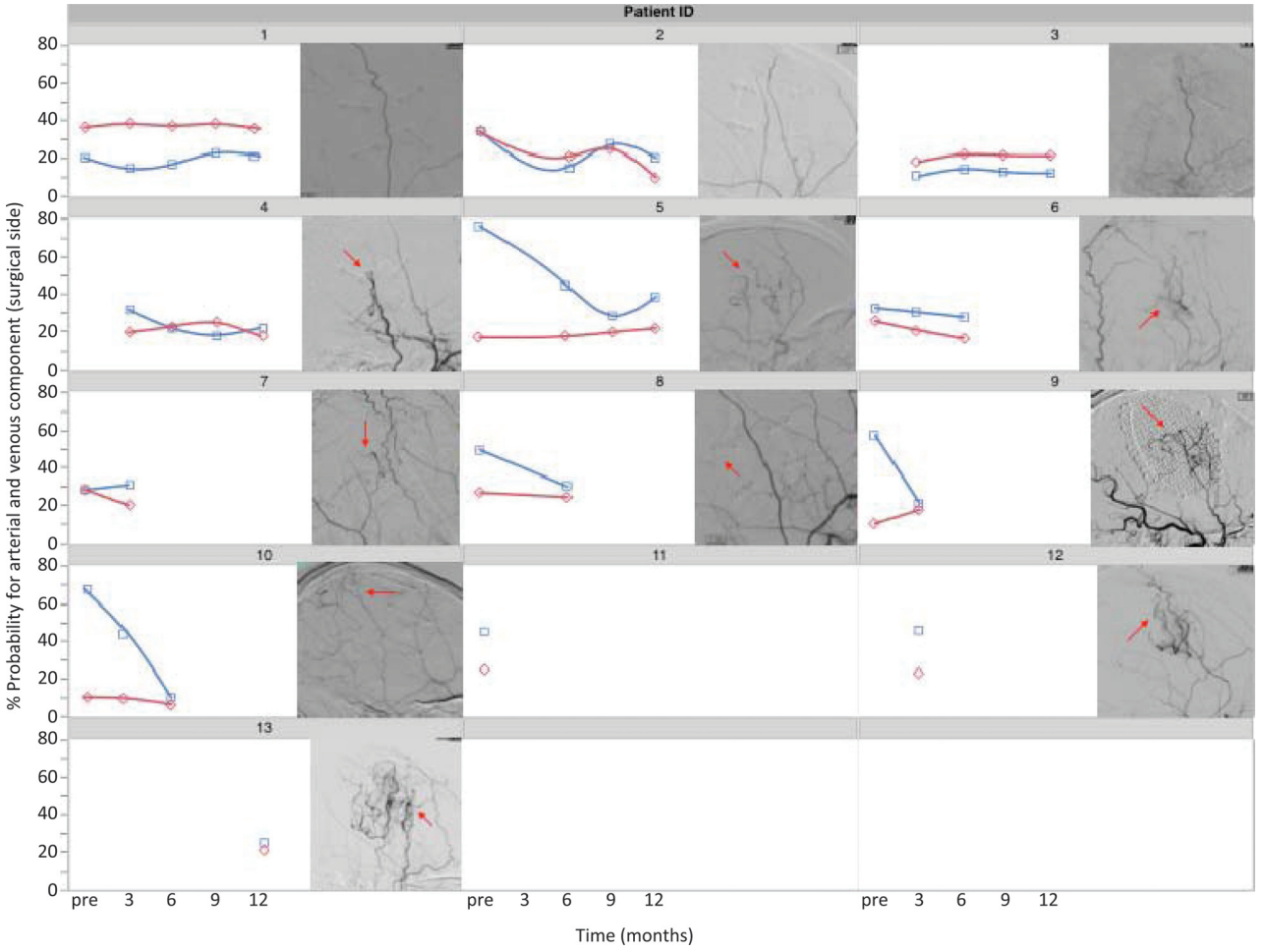


ON-LINE FIG 1. Probabilistic independent component analysis of presurgical DSC-MRI of a patient having undergone EDAS. Probability maps of arterial (*upper part*) and venous (*lower part*) components are depicted on axial sections. The color bar indicates local probability. Note the later and more dispersed perfusion of the contrast agent in the venous component. In direct comparison, the venous component shows a heightened probability within the left cerebral cortex. The left hemisphere is the surgical side.



ON-LINE FIG 2. Depicted are the scatterplots of rCBV, rCBF, and TTP with time from the operation for the surgical and the control side. None of these measures survived the correction for multiple comparisons.



ON-LINE FIG 3. Comparison between the results from the probabilistic independent component analysis and the postoperative DSA studies. For each patient, the results for the arterial and venous components are shown on the left, with the arterial component in red and the venous one in blue. A sagittal view of the respective postoperative DSA study (if available) is depicted directly to the right of these graphs. An exploration of the individual arterial and venous components on the surgical side of each patient shows that the pattern of an increased venous component at baseline does not hold true for patients 1, 2, 3, and 7. If one takes into account that patient 7 shows this inverted pattern at 3 months after the operation, then only patients 1–3 have a consistently higher probability for the arterial component in the surgical side, while all other patients show an inversion of probabilities perioperatively. Most interesting, the DSA studies show that only those patients who show this inversion of probabilities perioperatively developed new anastomoses between donor vessel and cerebrovasculature.