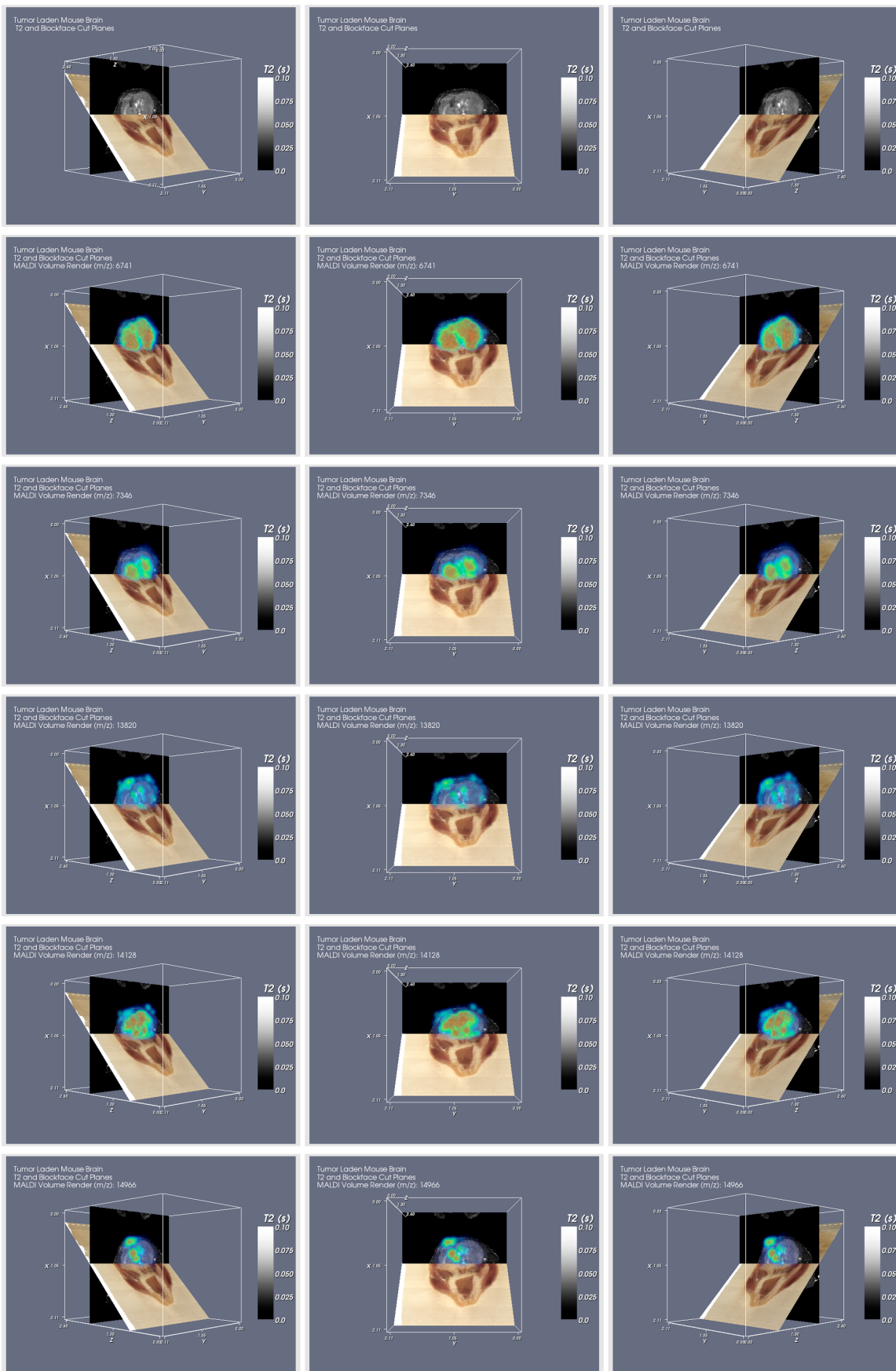


Supplementary Figure 3



Spatially resolved 3D MALDI volumes co-registered to in vivo MR imaging data from a tumor laden mouse brain. The top row shows three different views of an oblique blockface section and coronal T2 image co-registered to each other. The oblique image plane is presented to give reference to the extent of the mouse brain. The coronal image shows contrast variations related to the tumor and injection insult. Each subsequent shows a MALDI IMS volume of 20 slices volume rendered in the same views as the first row. The following m/z peaks are represented: 6741, 7346, 13820, 14128, and 14966, respectively. The injection insult is on the left hand side of the T2 image. Rows 4 and 6 show two peaks which are spatially localized to the injection insult. We believe the peak in row 4, m/z 13820, to be associated with the tumor as it manifests in the contralateral ventricle. Peak m/z 14966 is more isolated in its distribution and we believe it to be associated with the response to injection injury.