**Supplementary table 1.** Primary outcomes revealed by different imaging techniques and limitations in the identification of the peritumoral brain zone (PBZ).

| Radiological appearance of PBZ | | |
| --- | --- | --- |
|  | Sequences | PBZ area |
| CT scan |  | Signal not visible or covered by hyperdensity from brain edema |
| **MRI scan** | T1W | No signal |
| T2W | Signal covered by hyperhintensity from brain edema |
| T2W FLAIR | PBZ-Signal and brain edema |
| DWI ADC | PBZ-Signal and brain edema (high fractional anisotropy, mean diffusivity, radial diffusivity, axial diffusivity could help to distinguish it) |
| T1W CE | PBZ-Signal and brain edema |
| 18F‐FET PET |  | PBZ-Signal and brain edema, with hypermetabolism suggests active tumor infiltration |