

**臺灣大學核磁共振造影掃描參數設定表**

* 請填寫實驗所需掃描參數或選用本中心常規預設值，每個掃描部位皆需填寫一份設定表。
* 本表最遲請於正式實驗開始前繳交，以供中心人員確認。

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| 填寫日期： | | | | 年 | | 月 | 日 | |
| **研究計畫名稱** | (中文) | | | | | | |
| (英文) | | | | | | |
| **申請單位** |  | | | | | | |
| **計畫主持人** |  | | | | | | |
| **一、結構影像掃描 掃描部位：** | | | | | | | |
| ■ **Localizer** (0:12) – Sagittal、Coronal、Axial定位影像各一張 | | | | | | | |
| **□ 3D MPRAGE T1-weighted Image** | | | | | | | |
| └□ 預設： | ■ Sagittal View (4:40) □ Coronal View □ Axial View | | | | | | |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers | | |
| 240mm X 240mm | 256 X 256 | 0.94 mm | | 192 slices | | |
| └□ 自訂： | □ Sagittal View □ Coronal View □ Axial View | | | | | | |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers | | |
|  |  | mm | | slices | | |
| 備註： | | | | | | | |
| **□ 2D Turbo Spin-Echo Imaging** | | | | | | | |
| **└□ T1-weighted** | | | | | | | |
| └□ 預設： | □ Sagittal View □ Coronal View ■ Axial View (4:17) | | | | | | |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers | | |
| 192mm X 192mm | 256 X 256 | 依實驗需求設定 | | 依實驗需求設定 | | |
| └□ 自訂： | □ Sagittal View □ Coronal View □ Axial View | | | | | | |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers | | |
|  |  | mm | | slices | | |
| **└□ T2-weighted** | | | | | | | |
| └□ 預設： | □ Sagittal View □ Coronal View ■ Axial View (2:04) | | | | | | |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers | | |
| 192mm X 192mm | 384 X 384 | 依實驗需求設定 | | 依實驗需求設定 | | |
| └□ 自訂： | □ Sagittal View □ Coronal View □ Axial View | | | | | | |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers | | |
|  |  | mm | | slices | | |
| 備註：2D影像參數及對位將視功能性影像設定而定。除非實驗需要，一般由T1 / T2擇一掃描  (中心預設僅掃T2較省時)或只使用3D影像即可。 | | | | | | | |



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| **二、功能性影像掃描** | | | | |
| **□ Echo-Planar Imaging (EPI)** | | | | |
| └□ 預設： | ■ Gradient-Echo EPI □ Spin-Echo EPI | | | |
| TR | TE | Measurement | Number of EPI |
| 3000 ms | 30 ms | 2 | 1 |
| FOV | Maxtrix Size | Slice Thickness | Slice Numbers |
| 192mm x 192mm | 64 x 64 | 依實驗需求設定 | 依實驗需求設定 |
| └□ 自訂： | □ Gradient-Echo EPI □ Spin-Echo EPI | | | |
| TR | TE | Measurement | Number of EPIs |
| ms | ms |  |  |
| FOV | Maxtrix Size | Slice Thickness | Slice Numbers |
|  |  | mm | slices |
| 備註：Scan Time = TR x Measurement  Measurement – 請填寫每種measurement各需幾組 (ex. 100 x2組/200 x 3組)  Number of EPI – 請填寫總共需掃幾組EPI影像 | | | | |
| **□ Steady-State Free Precession (SSFP)** | | | | |
| └□ 預設： | TR | TE | Measurement | Number of SSFP |
| 250 ms | 1.48 ms | 2 | 1 |
| FOV | Maxtrix Size | Slice Thickness | Slice Numbers |
| Min 50mm x 50mm | 64 x 64 | 0.78 mm | 10 slices |
| └□ 自訂： | TR | TE | Measurement | Number of SSFP |
| ms | ms |  |  |
| FOV | Maxtrix Size | Slice Thickness | Slice Numbers |
|  | 64 x 64 | mm | slices |
| 備註： | | | | |



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| **□ Perfusion-Weighted Functional Imaging** | | | | | |
| └□ 預設： | ■ 2D (PICORE) □ 3D(FAIR) | | | | |
| TR / TE / TI | Number of TI | Measurement | | Number of Perfusion |
| 2000 / 13 / 1200 ms | 1 | 1 | | 1 |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers |
| 192mm x 192mm | 64 x 64 | 3 mm | | 35 slices |
| └□ 自訂： | □ 2D (PICORE) □ 3D(FAIR) | | | | |
| TR / TE / TI | Number of TI | Measurement | | Number of Perfusion |
| ms |  |  | |  |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers |
|  |  | mm | | slices |
| 備註： | | | | | |
| **□ Diffusion-Weighted Functional Imaging** | | | | | |
| └□ 預設： | □ DWI □ DTI ■ DSI | | | | |
| TR | TE | Measurement | | Number of Perfusion |
| 6300 ms | 97 ms | 1 | | 1 |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers |
| 222mm x 222mm | 82 x 82 | 2.7 mm | | 45 slices |
| Number of B0 | Max B-Value | Direction | | |
| 1 | 5000 | 3 Q-Space Weighting | | |
| └□ 自訂： | □ DWI □ DTI □ DSI | | | | |
| TR | TE | Measurement | | Number of Perfusion |
| ms | ms |  | |  |
| FOV | Maxtrix Size | Slice Thickness | | Slice Numbers |
|  |  | mm | | slices |
| Number of B0 | Max B-Value | Direction | | |
|  |  |  | | |
| 備註： | | | | | |
| **三、其他掃描波序設定** | | | | | |
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| **填 表 人：** | | | |  | |