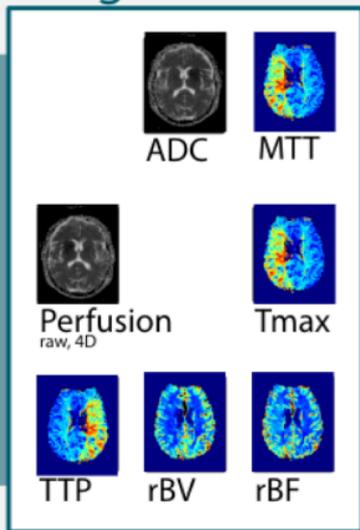


# Préparation de données "images" pour la prédiction de la lésion finale en AVC

Carole Frindel

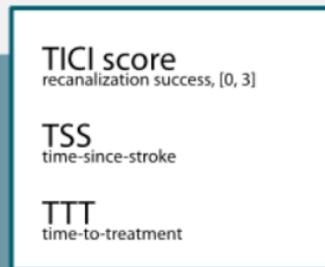
# Données “images” pour la prédiction en AVC

## Image data



At admission  $H_0$

## Clinical data



## Lesion outcome



## Clinical outcome



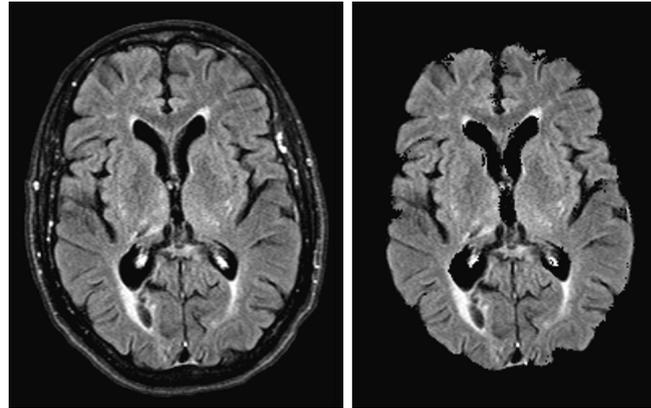
One week after  $J_7$



# Extraction de la boîte crânienne



T1



FLAIR

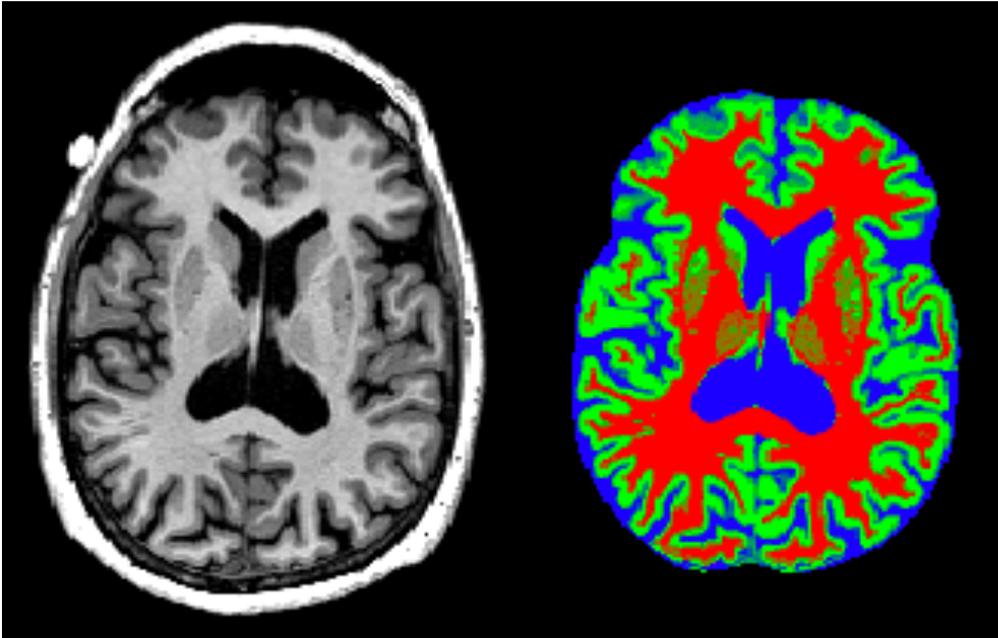
**A faire sur les différentes modalités IRM**

**Différents outils existants:**

**FSL BET (<https://fsl.fmrib.ox.ac.uk/fsl/fslwiki/BET/UserGuide>)**

**HD-BET (<https://github.com/MIC-DKFZ/HD-BET>)**

# Segmentation des tissus



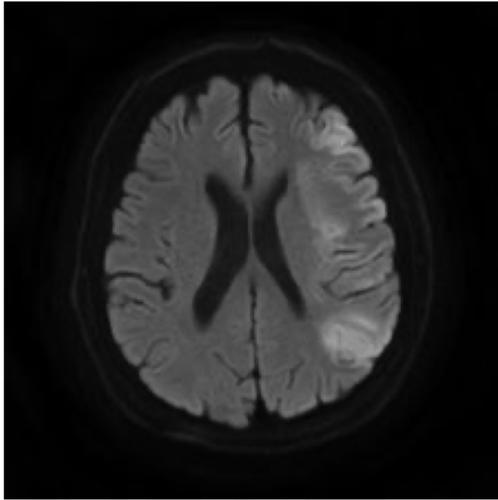
A faire sur les modalités IRM anatomiques (T1, T2 ou FLAIR)

Différents outils existants:

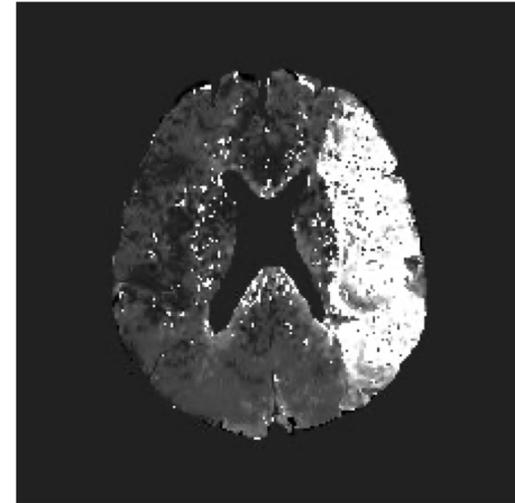
FSL FAST (<https://fsl.fmrib.ox.ac.uk/fsl/fslwiki/FAST>)

FreeSurfer (<https://surfer.nmr.mgh.harvard.edu/>)

# Recalage en aigü (H0)



DWI\_MR (H0)



TMAX\_MR (H0)

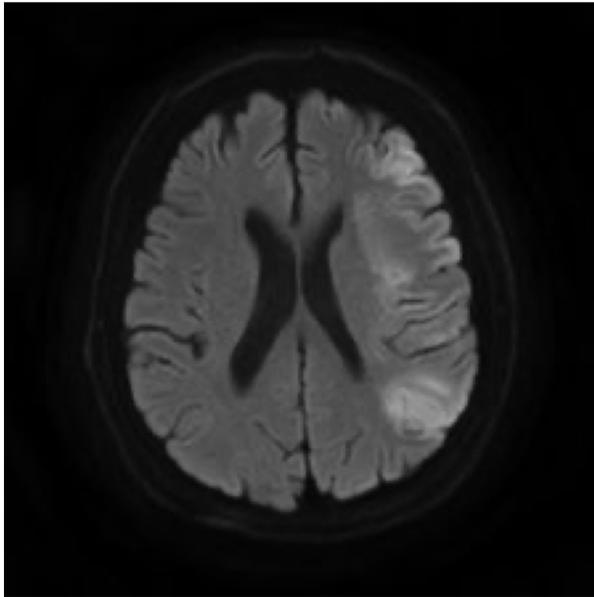
## Recalage affine

Différents outils existants:

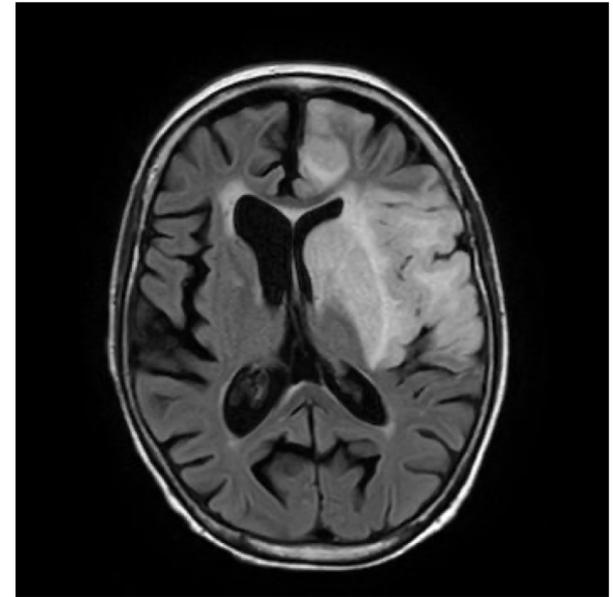
FSL FLIRT (<https://fsl.fmrib.ox.ac.uk/fsl/fslwiki/FLIRT>)

ANTs (<https://github.com/ANTsX/ANTs>)

# Recalage longitudinal



DWI\_MR (H0)



FLAIR\_MR (J7)

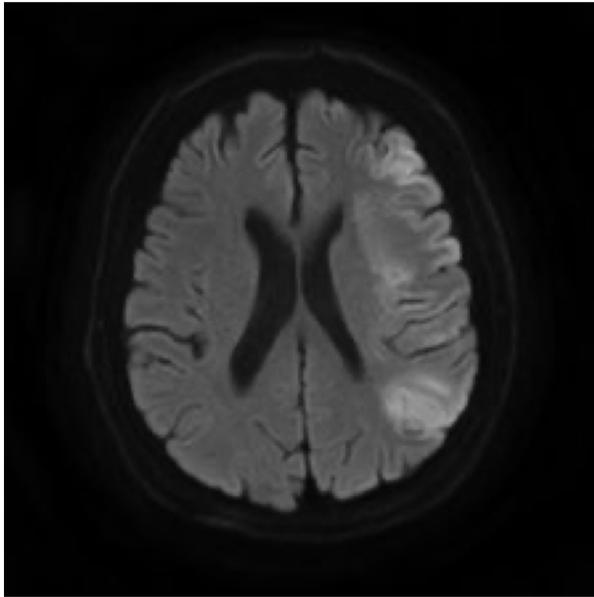
## Recalage non linéaire

Différents outils existants:

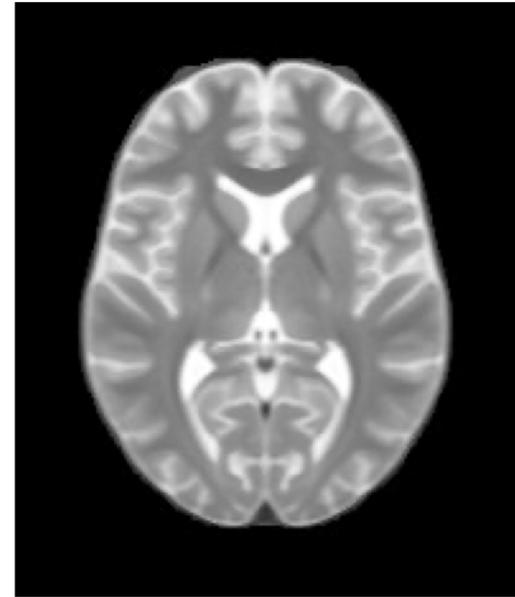
FSL FNIRT (<https://fsl.fmrib.ox.ac.uk/fsl/fslwiki/FNIRT>)

ANTS (<https://github.com/ANTsX/ANTs>)

# Recalage sur atlas



DWI\_MR (H0)



Atlas MNI

**Recalage non linéaire**

**Différents outils existants:**

**FSL FNIRT (<https://fsl.fmrib.ox.ac.uk/fsl/fslwiki/FNIRT>)**

**ANTS (<https://github.com/ANTsX/ANTs>)**