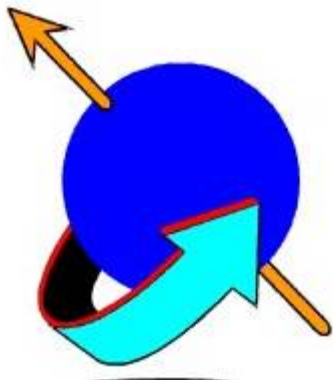


# *MR mozgových MTS - z hľadiska rádioterapie*

V. Belan,  
Dr. Magnet Kramáre  
Bratislava



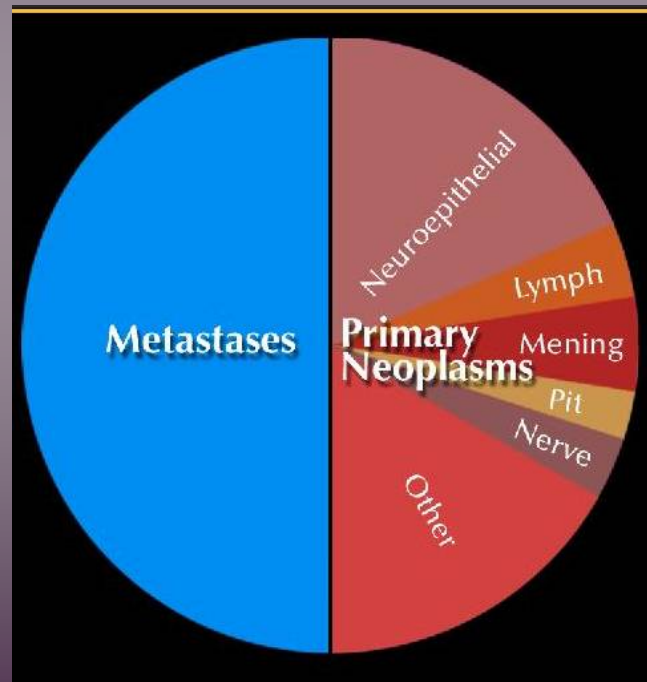
 **PRO DIAGNOSTIC  
GROUP a.s.**

 **DR. MAGNET**  
magnetická rezonancia kramáre

# *Klasifikácia mozgových nádorov*

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- Primárne
- Sekundárne (MTS)



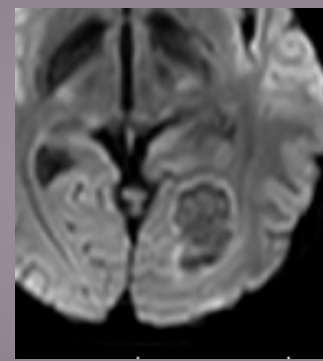
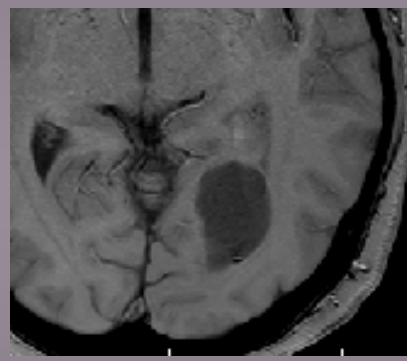
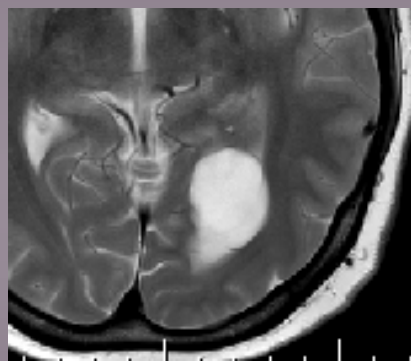
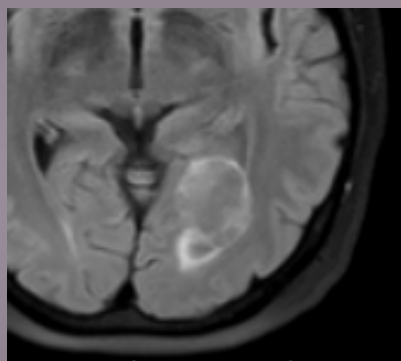
# *MTS v mozgu*

## MR

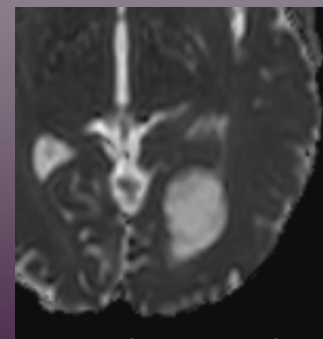
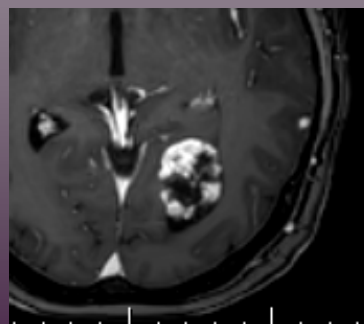
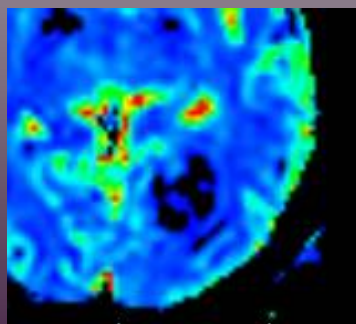
- detekcia MTS : u známeho malígneho ochorenia ochorenia
- detekcia MTS : na základe neurologických príznakov ( prvá manifestácia malígneho ochorenia)
- pred op – charakterizácia, planovanie op. výkonu
- po op ( do 72 hod, 3-6 mes)
- po op.- reziduum

## Pôvod MTS

- melanóm  $\uparrow$  T1
- mucinózne  $\downarrow$  T2
- hemoragické: melanóm, kolon...



Mucinózna MTS  
Ca prsníka

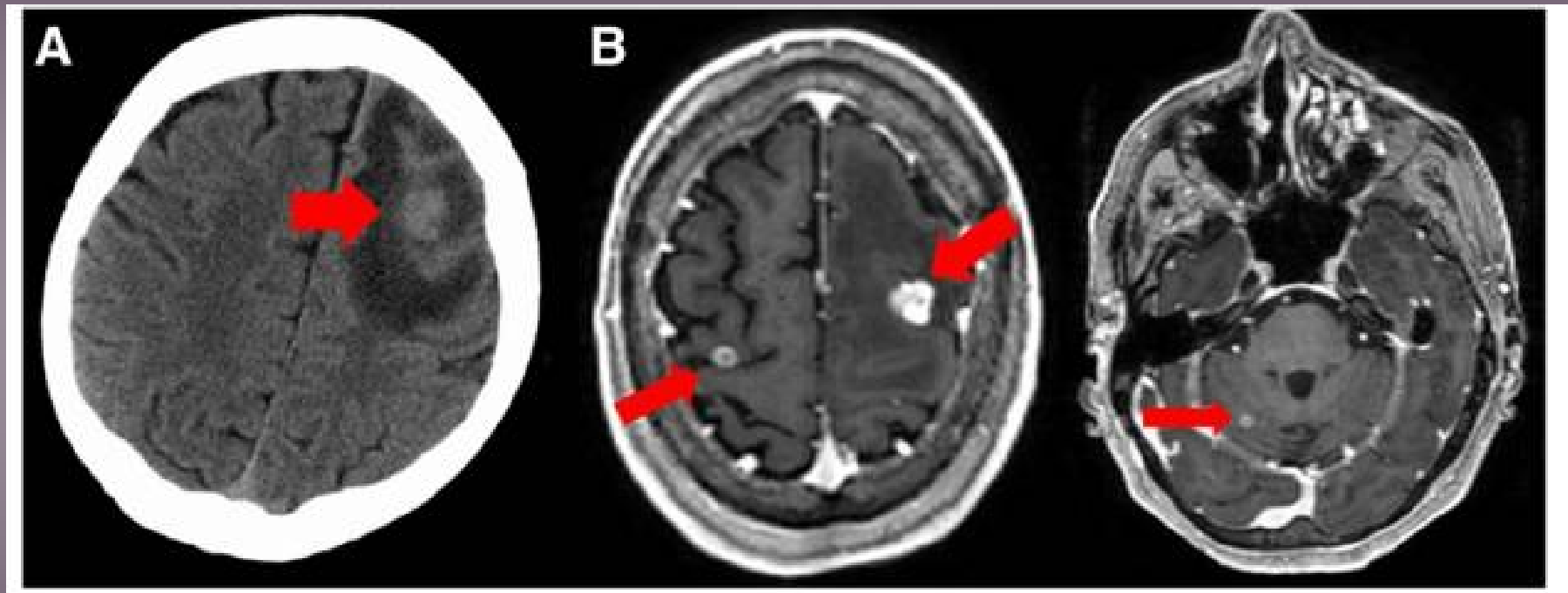


# *MTS v mozgu*

## MR

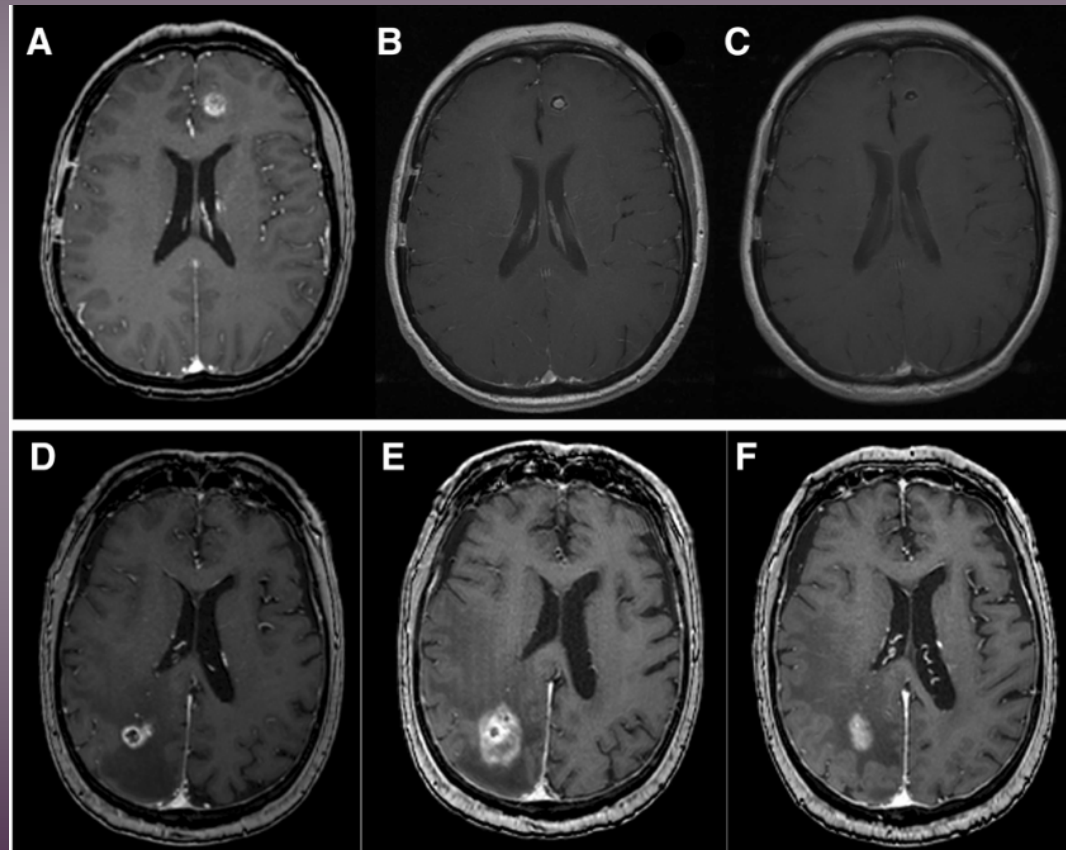
- Monitoring odpovede na RAT, RAT/CHT

MR Gd > CT > natívne MR  
Gd 3D T1 mprage, FLAIR < 3mm



# Monitorovanie odpovede na chemo/RAT

- cMR – Gd T1
- rádionekróza/rekurencia



Zakaria et al. Cancer Imaging  
2014, 14:8

# Monitorovanie odpovede na chemo/RAT

- cMR – Gd T1
- PMR – CBF a CBV – nekróza a rekurencia
- prediktívna hodnota finálnej odpovede – biomarker
- ADC bezprostredne po liečbe - ↑
  
- MR metrics – prediktívny potenciál



# *MTS v mozgu*

Skríning intrakraniálnych MTS  
CT/MR

MR 2-3x MTS viac ako CT ( menej ako  
5 mm)

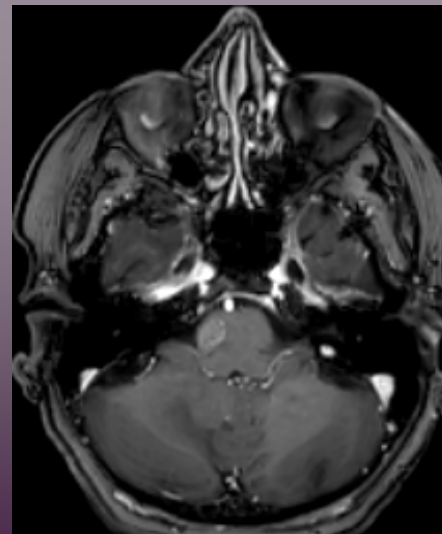
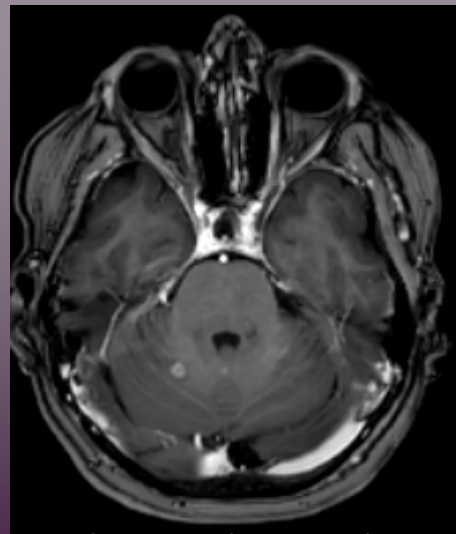
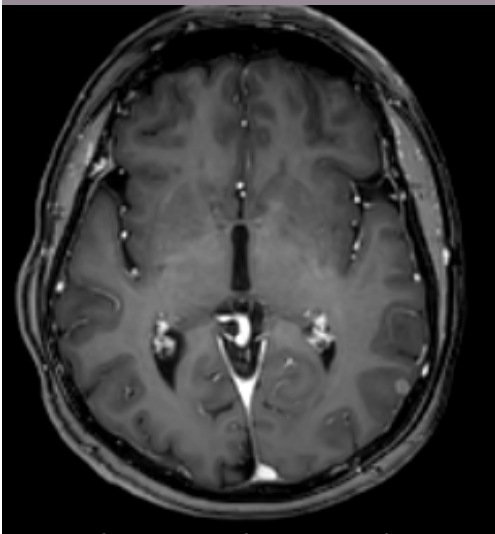
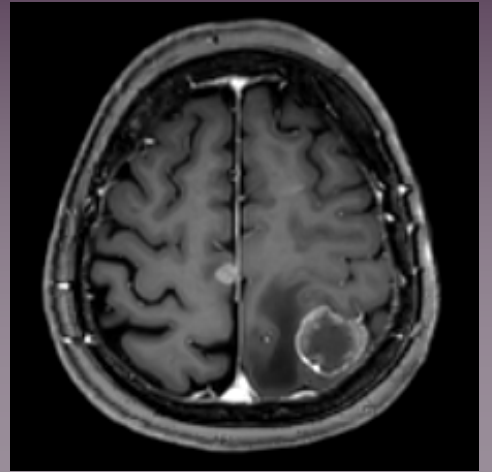
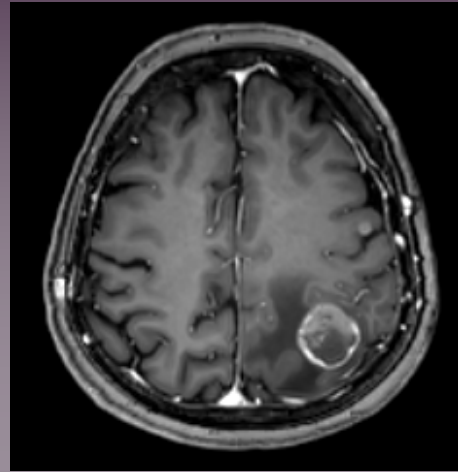
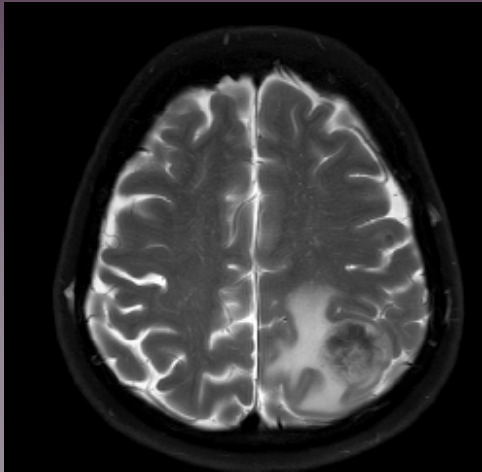
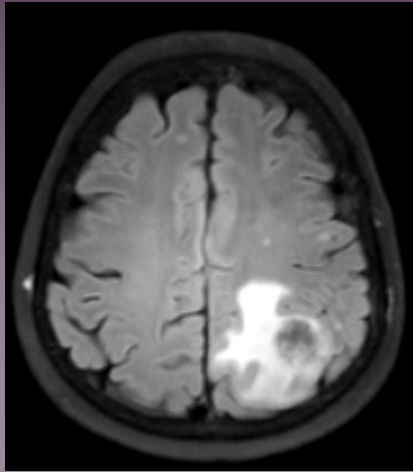
MR u často MTS ( bronchogenný Ca)

# *MR MTS v mozgu*

Primárna úloha rádiológa (MR)  
intervencia (neurochir/RAT):

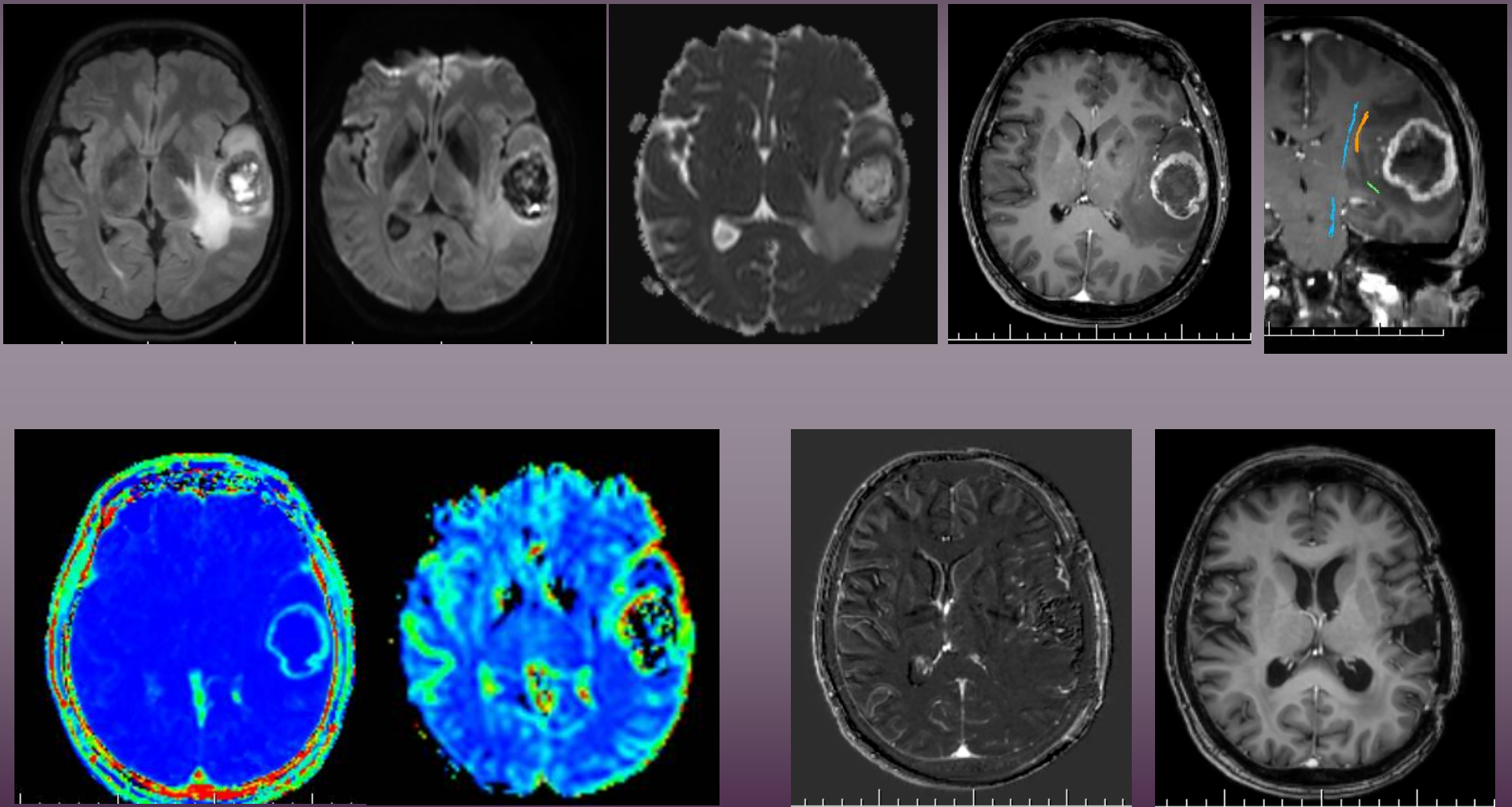
- počet
- lokalizácia
- veľkosť

# Mnohopočetné MTS



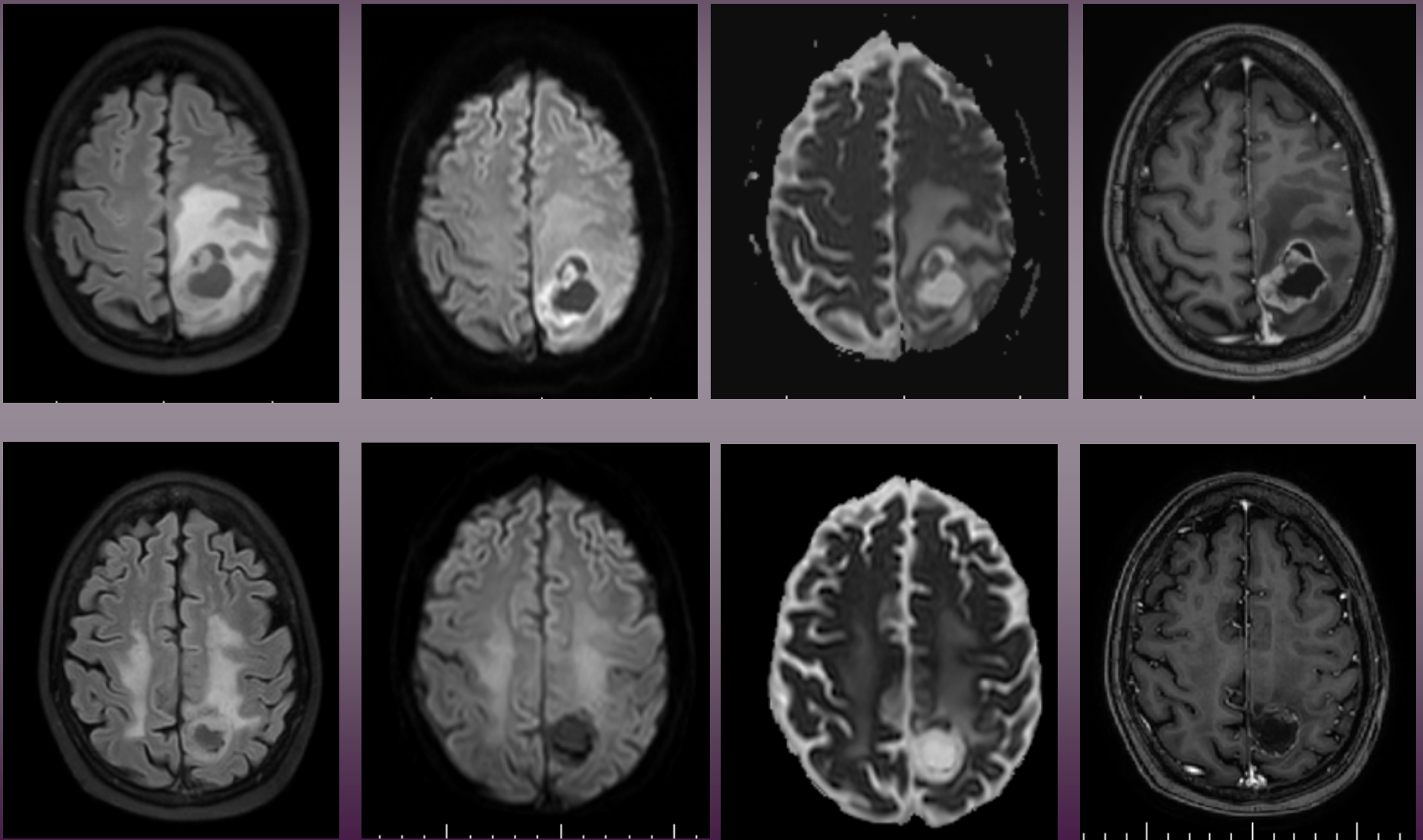
# Solitárna MTS malígneho melanómu

## Stav po op, po 2 rokoch



# Solitárna MTS Ca prsníka

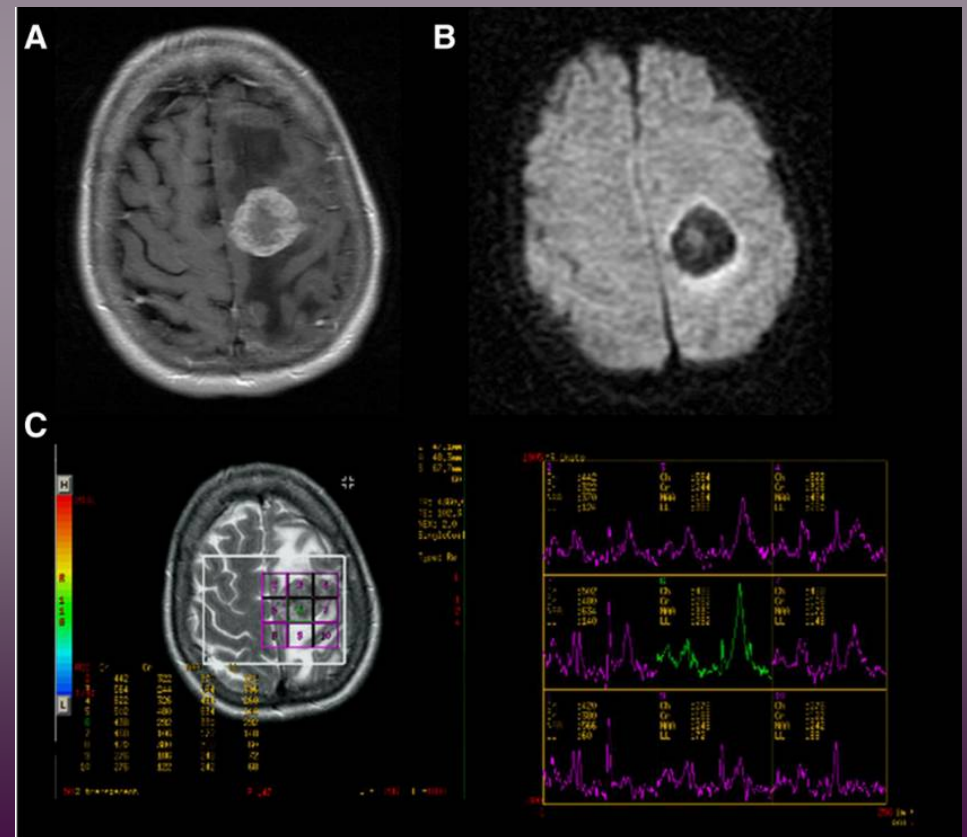
## Stav po RAT a CHT, po 4 rokoch



# Solitárna lézia Gd+ prstencovitě ložisko/ neznáma primární Ca

Dif. Dg.: MTS, Absces, HGG

- absces: DWI - !!malobunkový Ca pľúc a lymfóm
- HGG - MTS

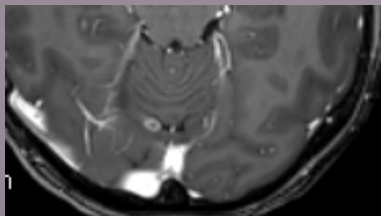
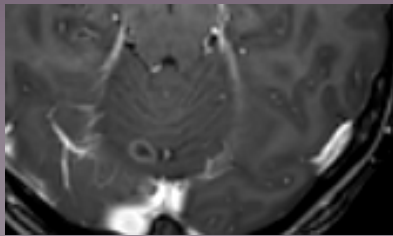


Zakaria et al. Cancer Imaging  
2014, 14:8

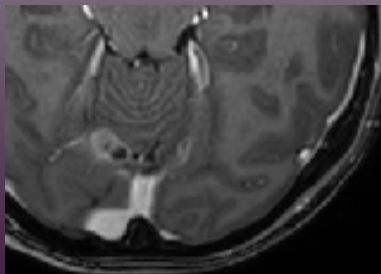
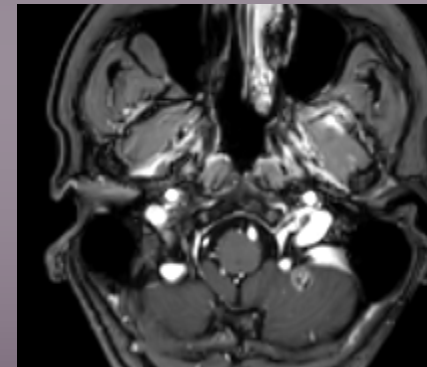
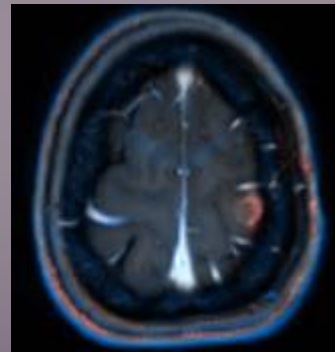
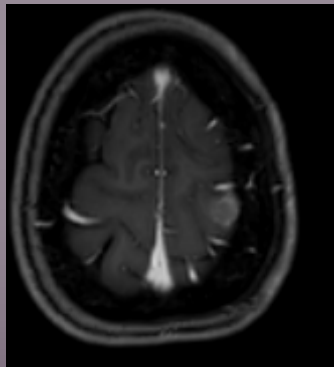


# Solitárna MTS Ca cervixu

## Monitorovanie po SRCH



↑ po 5 m →

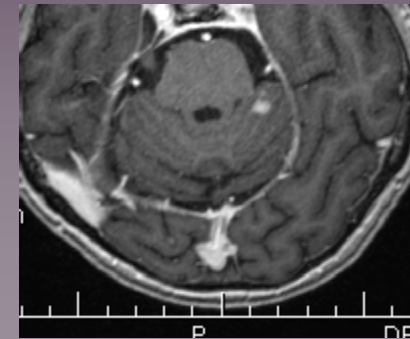
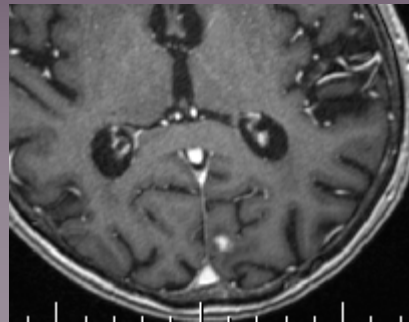


← po 9 m

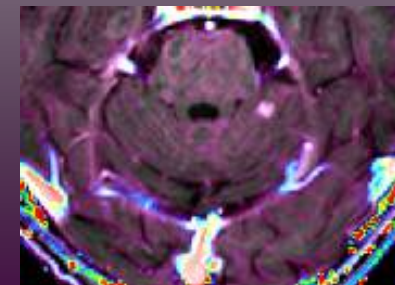
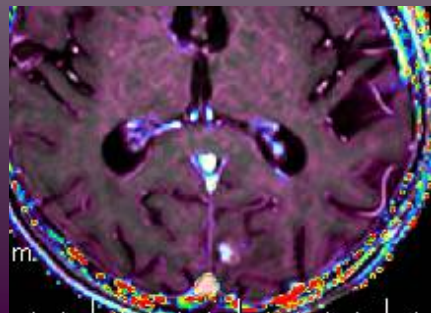
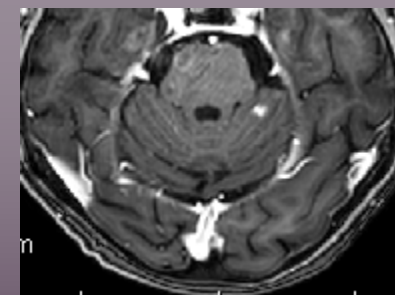
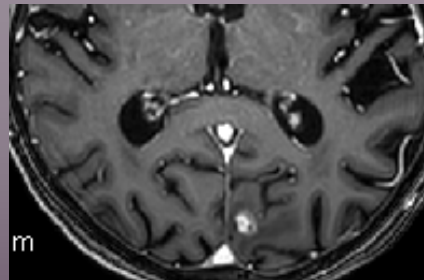
# MTS adenoCa pľúc

## Monitorovanie po WBRT a 2 SRCH od 2013

pred SRCH  
09/2017 →

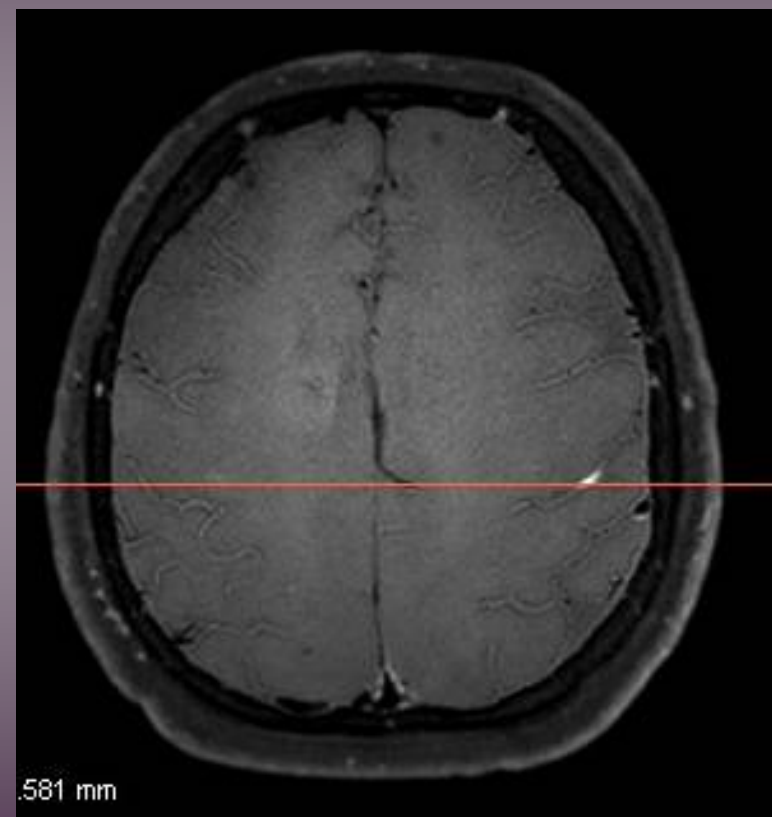
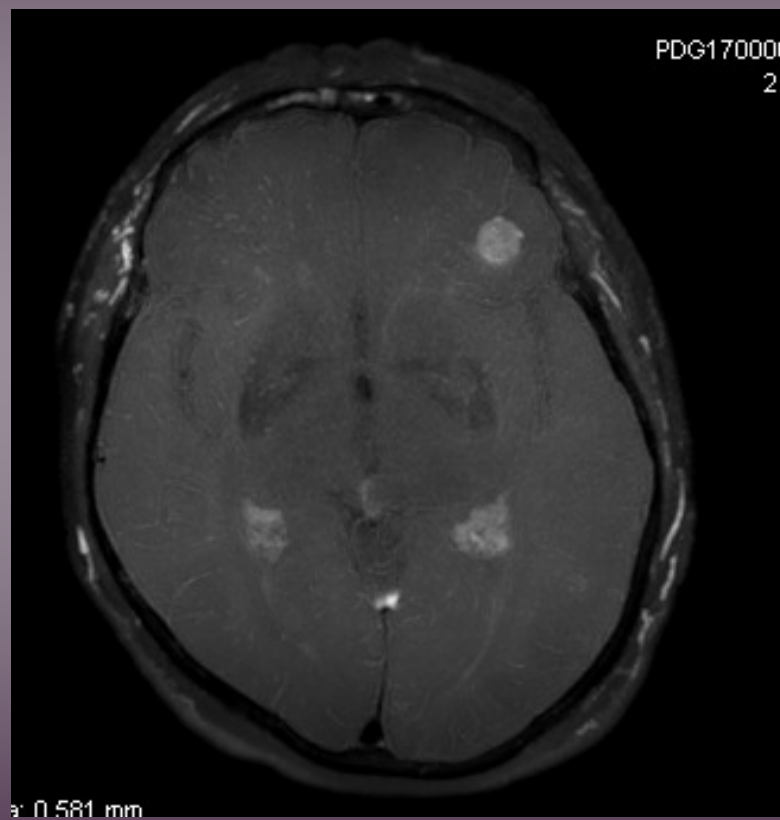


po 2m →





## 3D BrainVIEW\_BB



Ďakujem za pozornosť