

# Bruk av kunstig intelligens i forskning på hjerneavbildningsdata



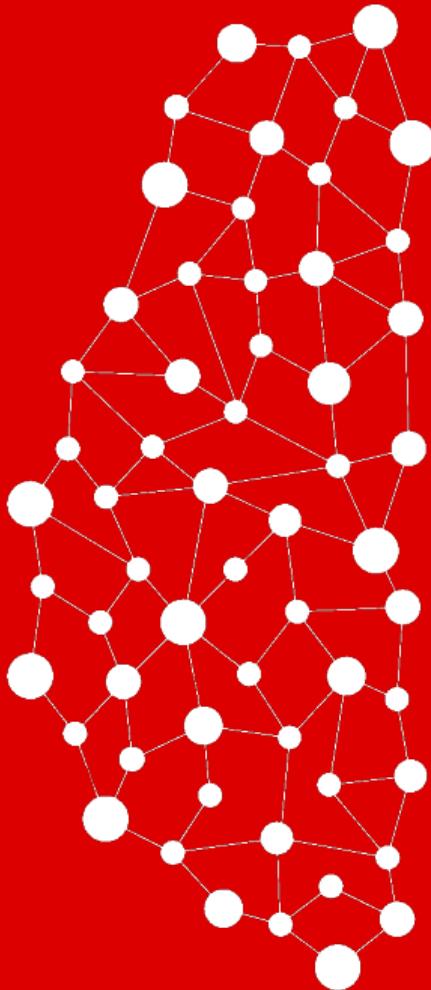
Esten H. Leonardsen

Post-doktor ved Psykologisk institutt,  
Universitet i Oslo

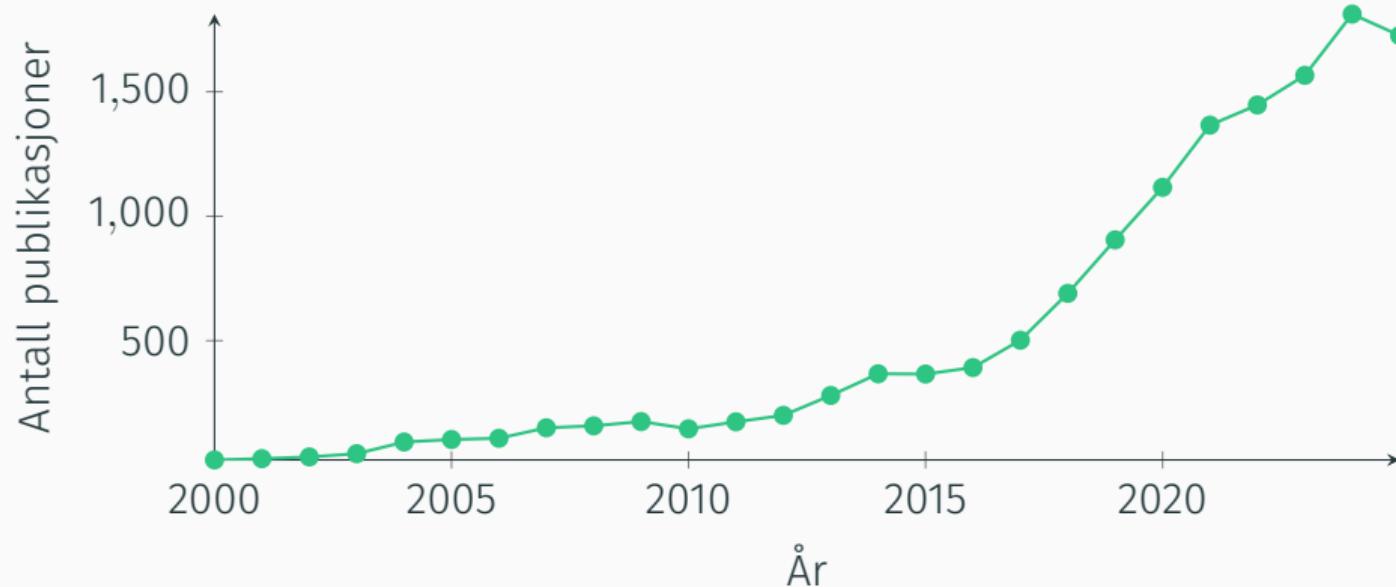
Chief Scientific Officer, baba.vision



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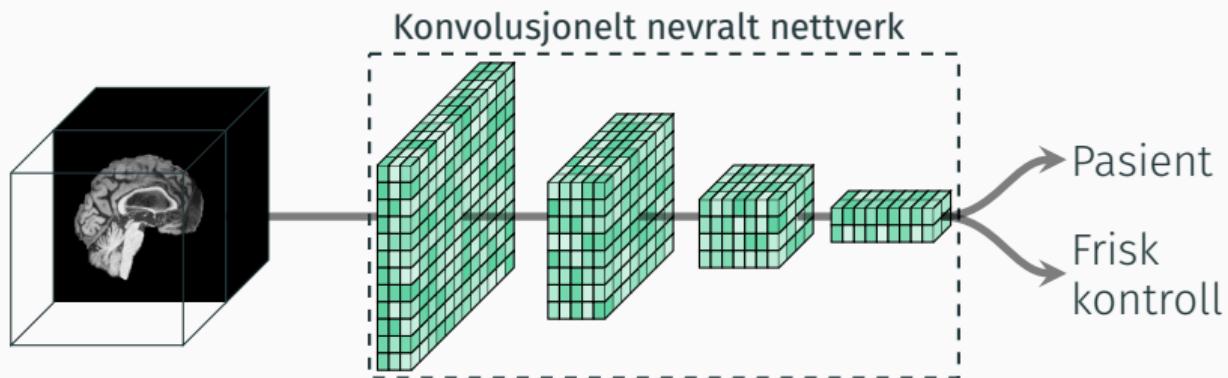
# Kunstig intelligens og hjerneavbildning



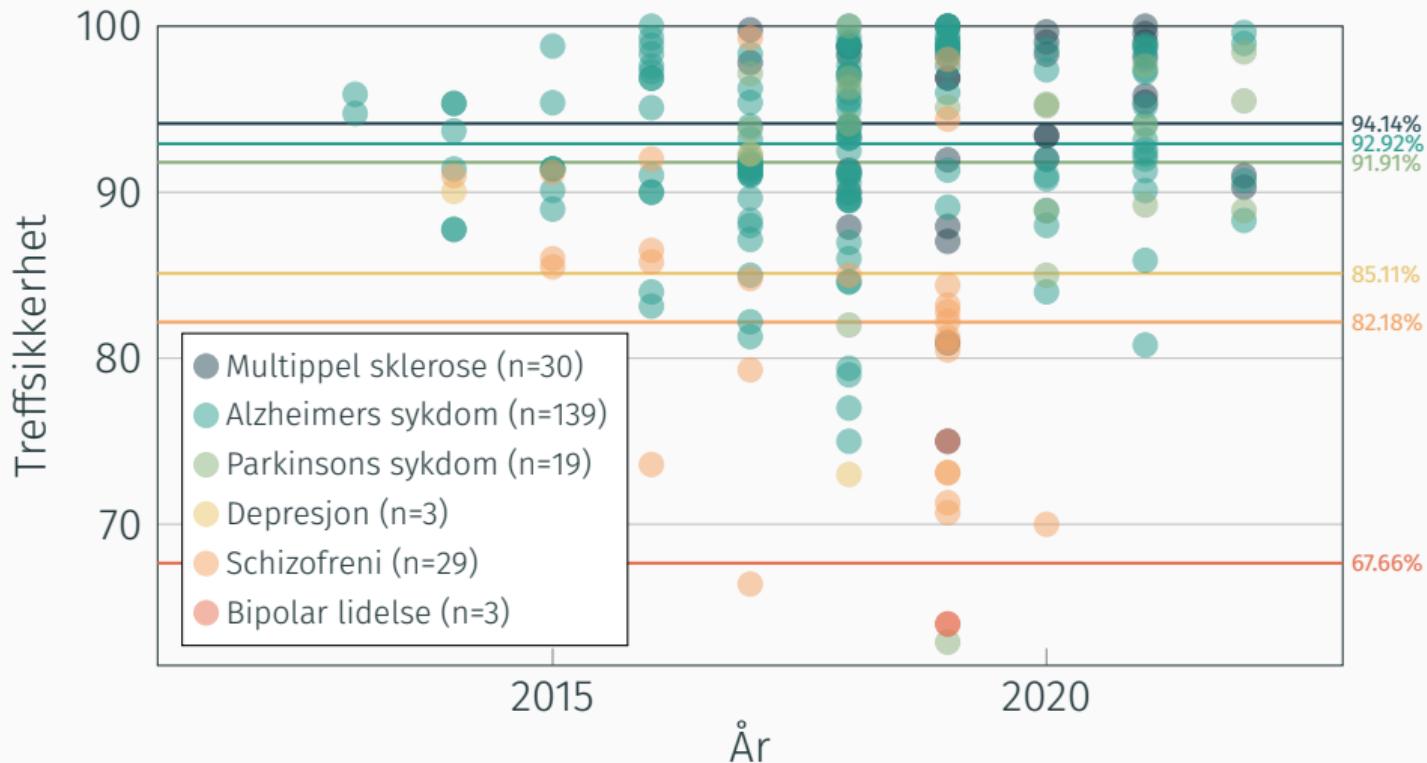
Artikler som inneholder "neuroimaging OG (artificial intelligence ELLER machine learning ELLER deep learning)"  
fra <https://pubmed.ncbi.nlm.nih.gov>



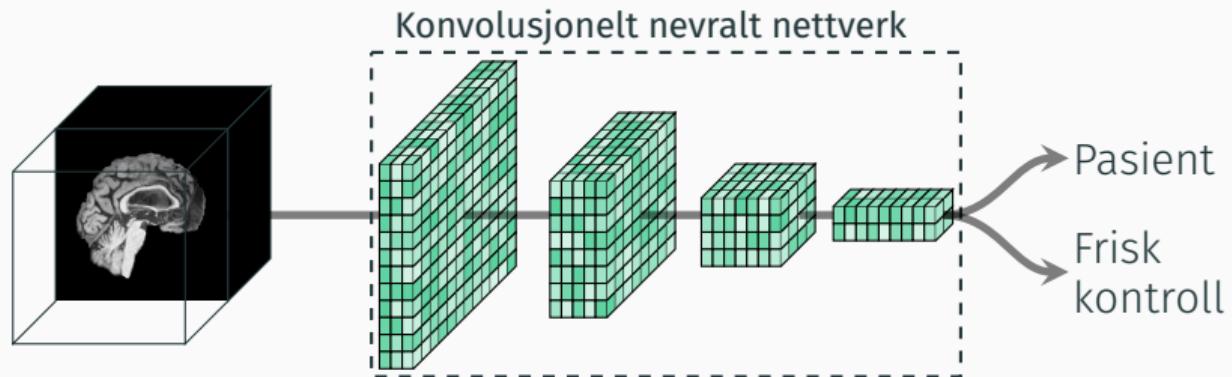
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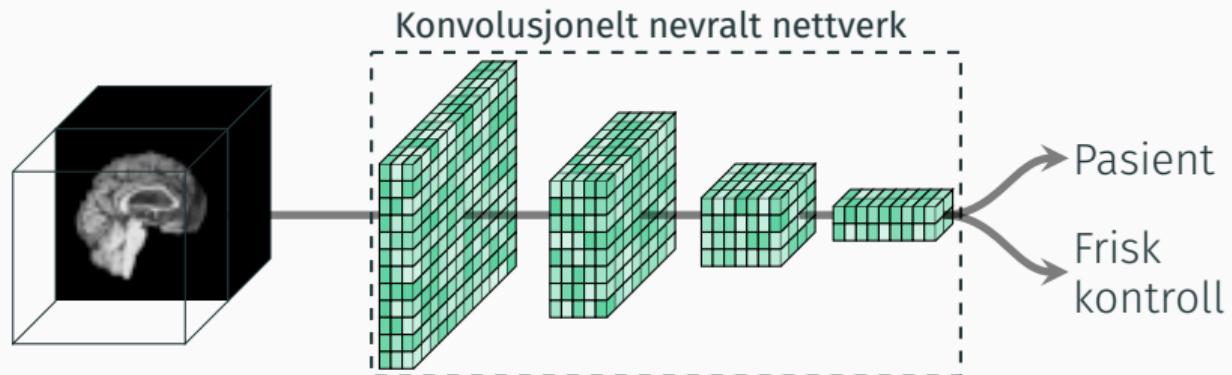
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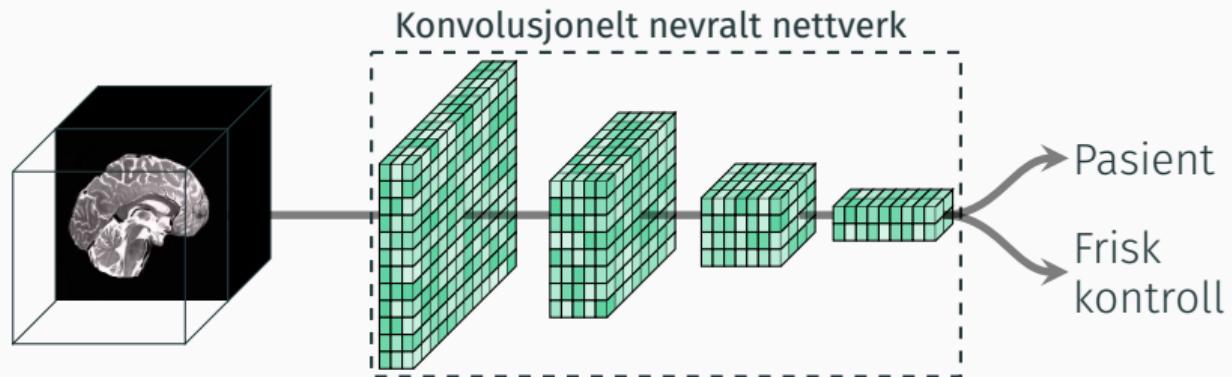
# Forskjeller i bildeprotokoller



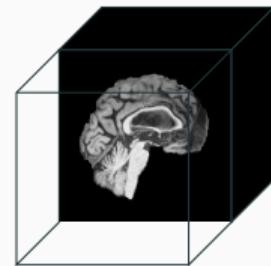
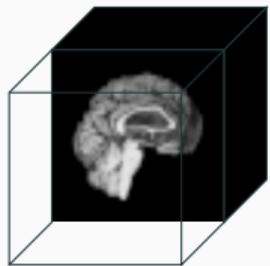
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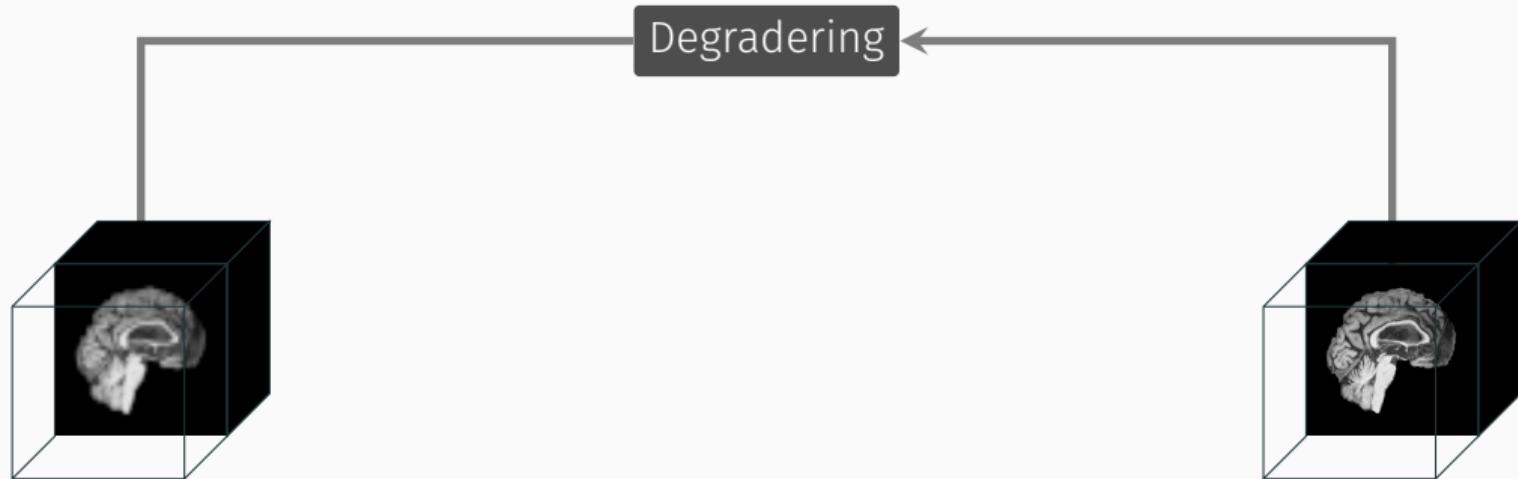
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Juan E. Iglesias et al., SynthSR: A public AI tool to turn heterogeneous clinical brain scans into high-resolution T1-weighted images for 3D morphometry. *Science Advances* (2023)



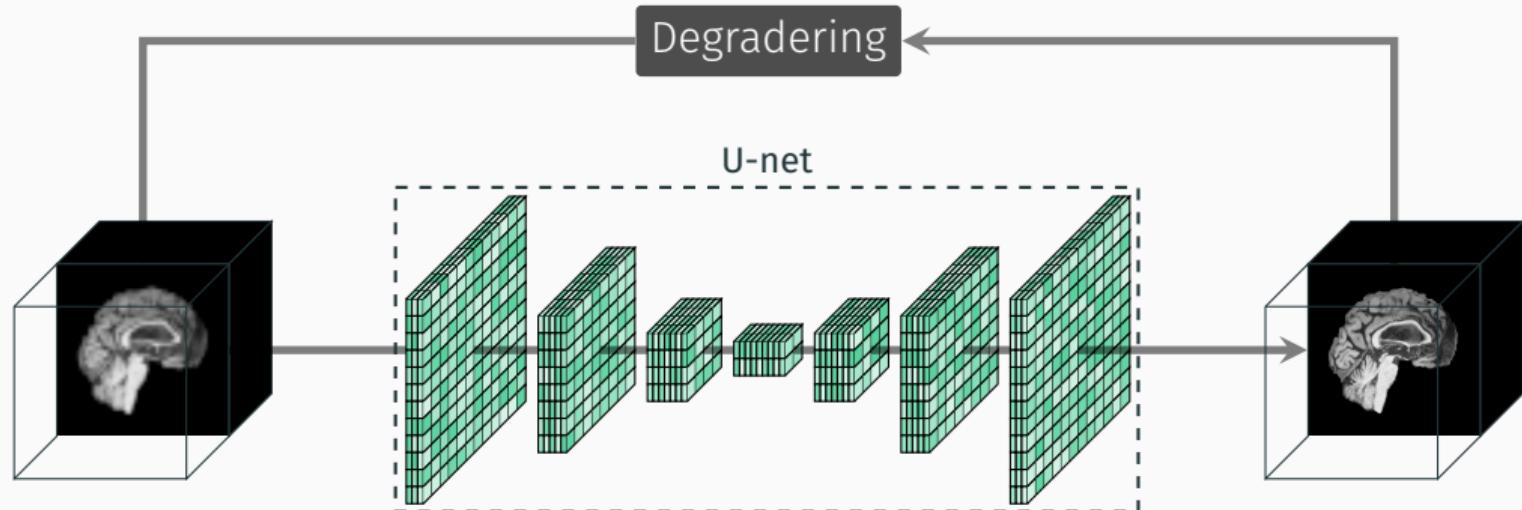
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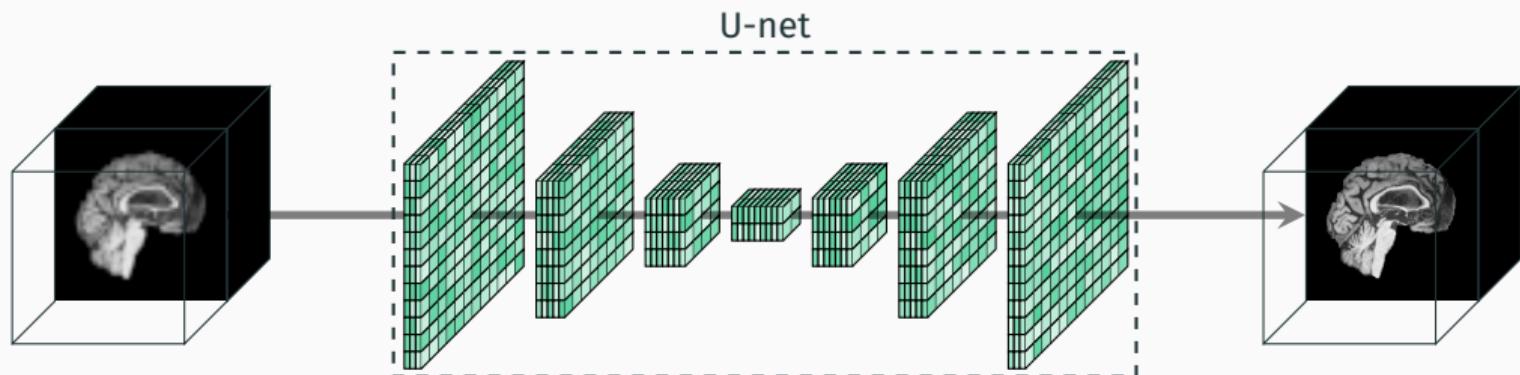
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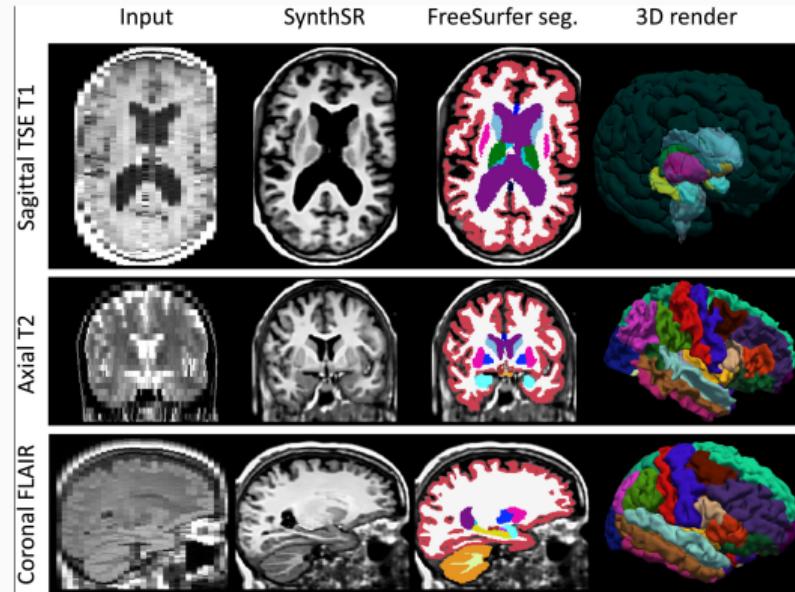
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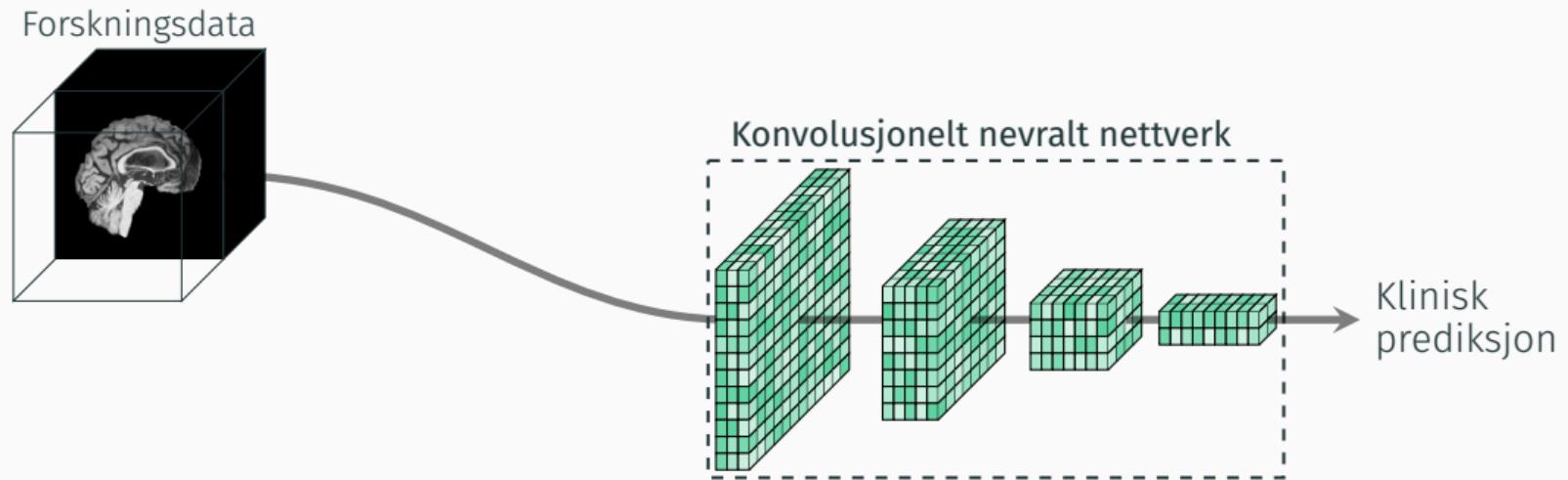
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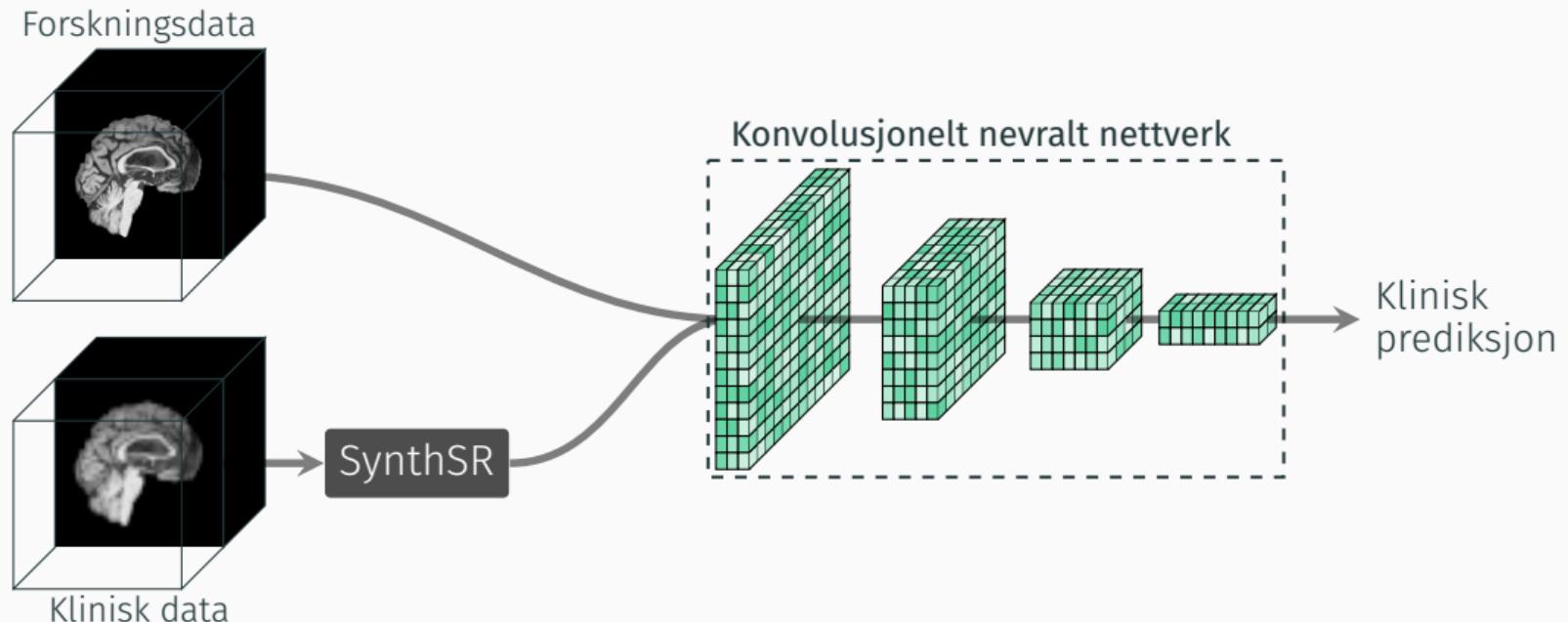
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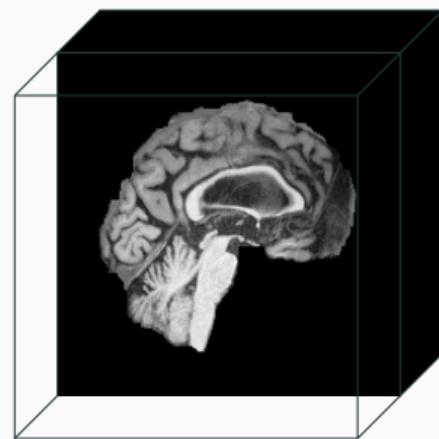
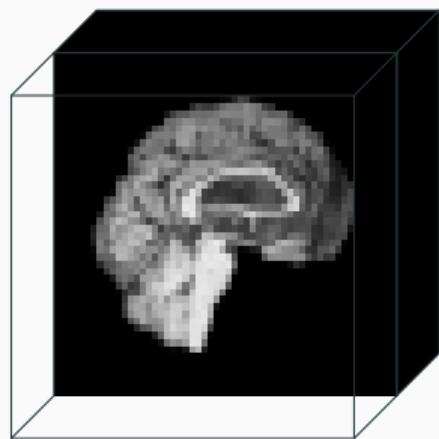
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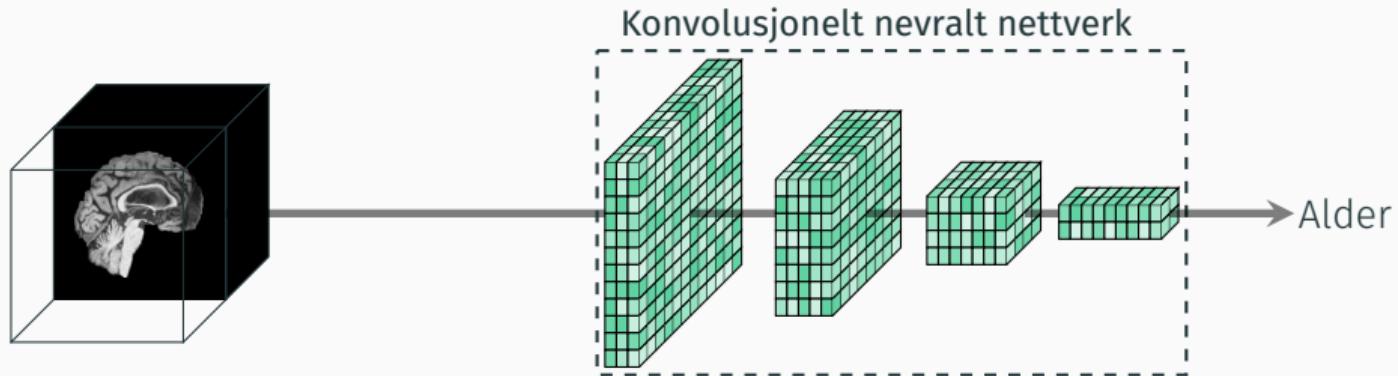
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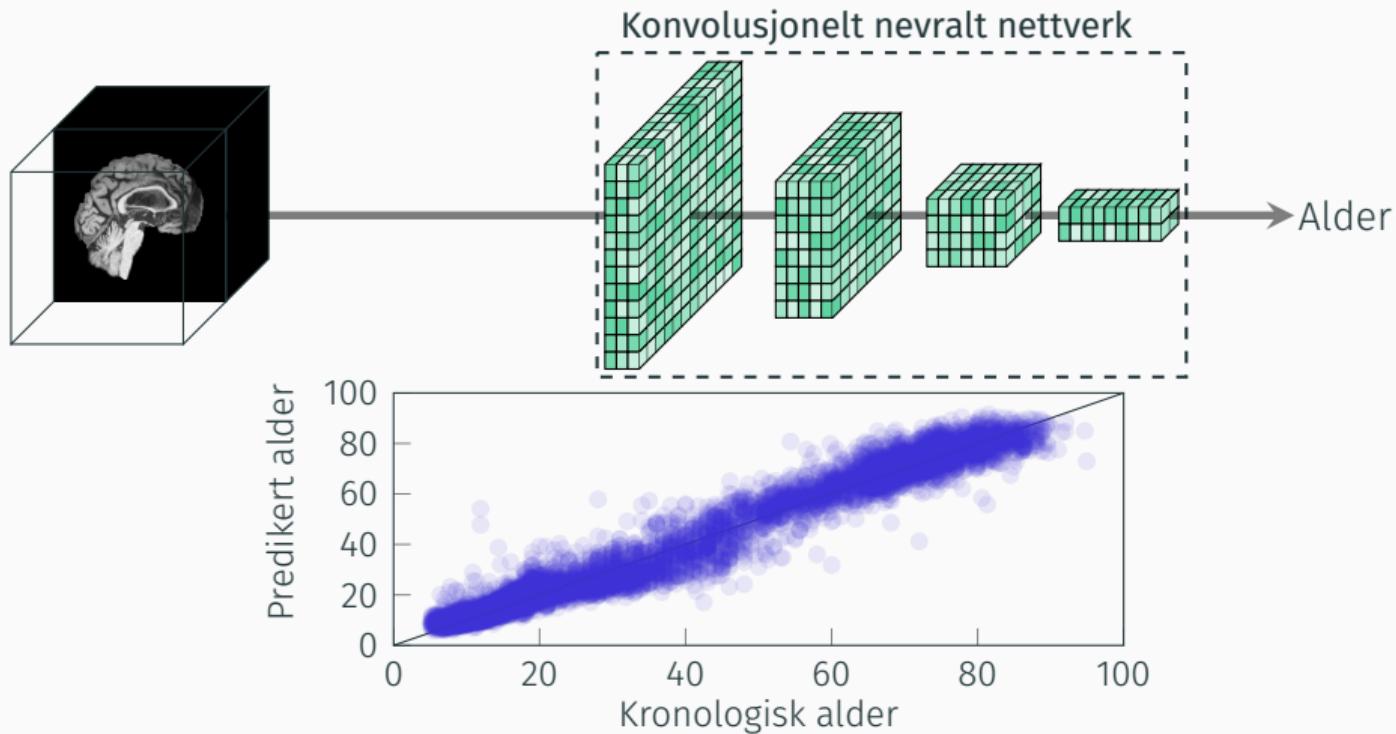
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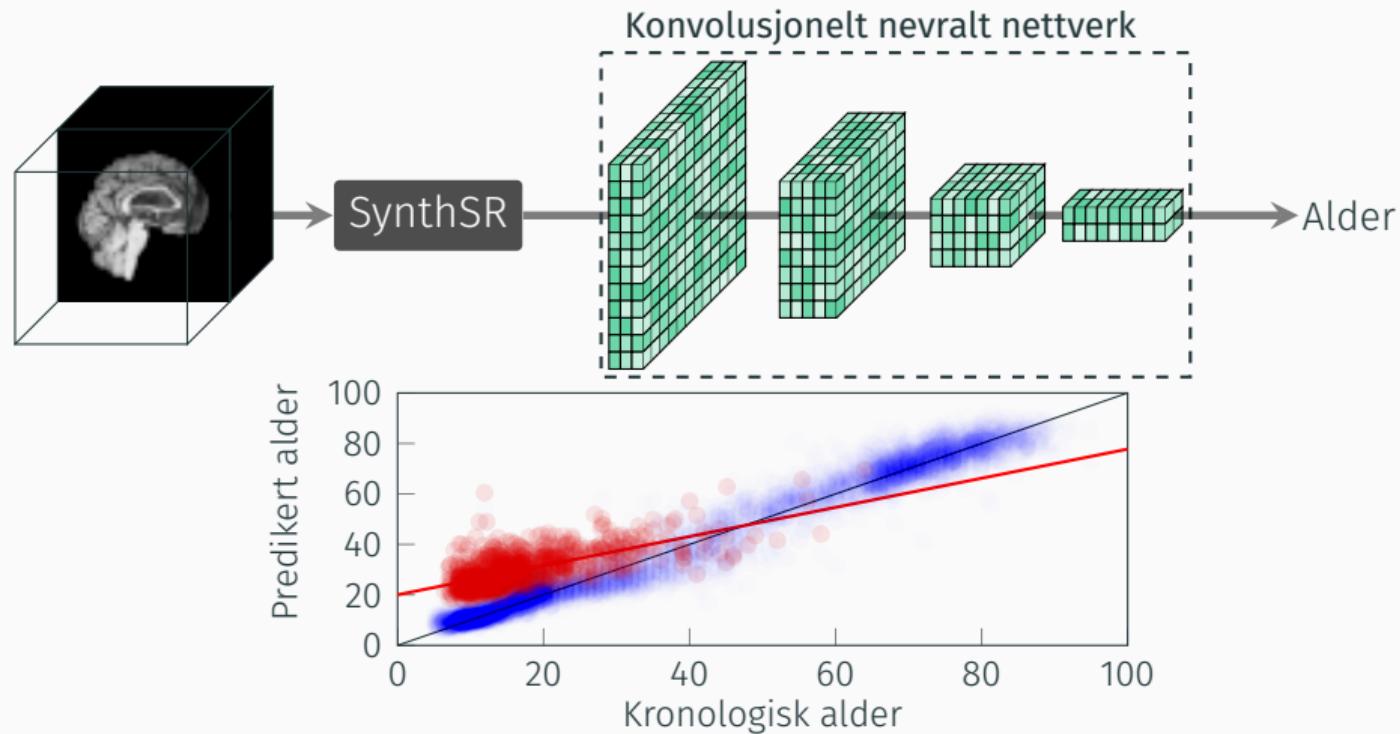
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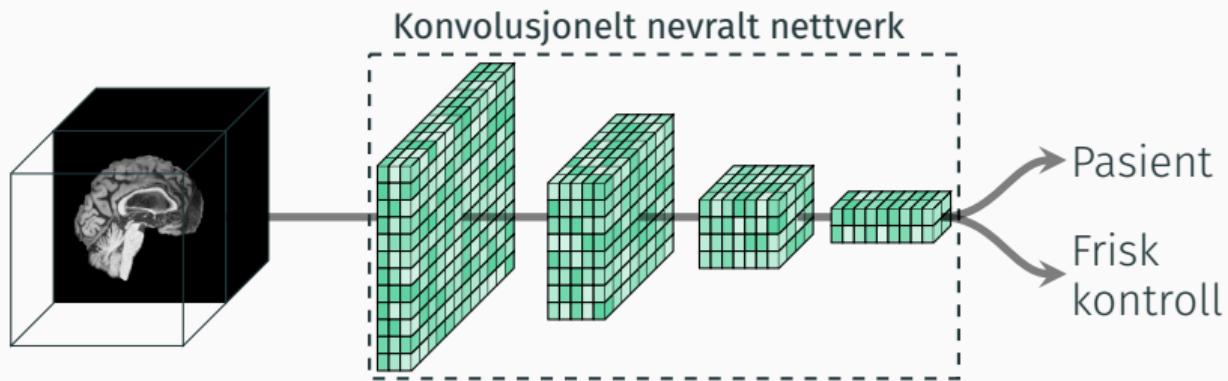
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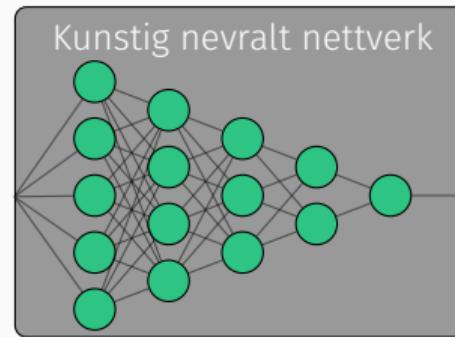
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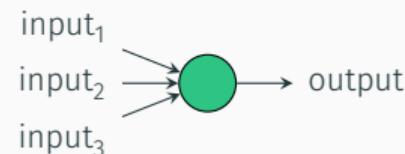
# Forklarbarhetsproblemet med kunstig intelligens



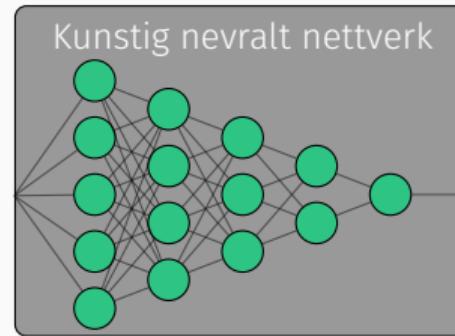
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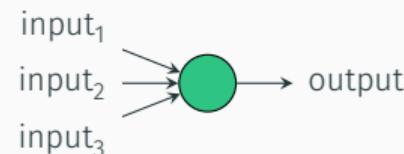
Kunstig nevron



# Forklarbarhetsproblem med kunstig intelligens



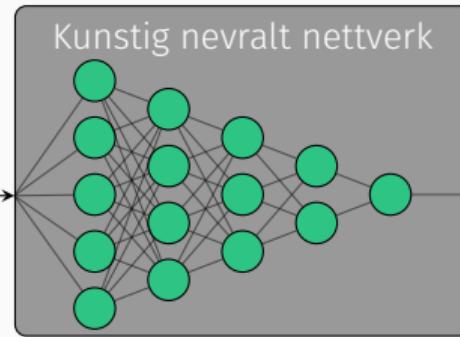
Kunstig nevron



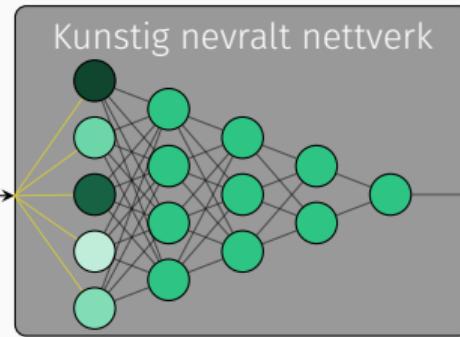
$$\text{output} = \max(0, b + \text{input}_1 * w_1 + \text{input}_2 * w_2 + \text{input}_3 * w_3)$$



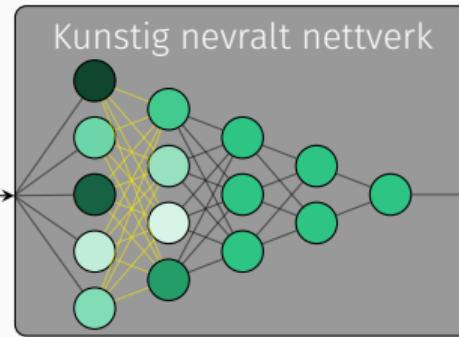
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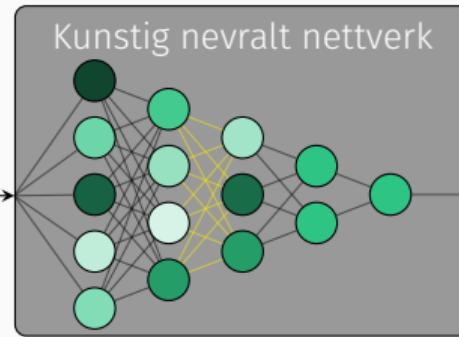
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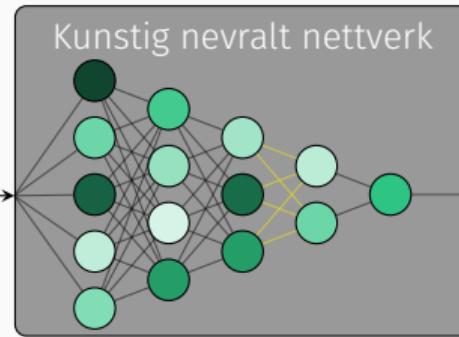
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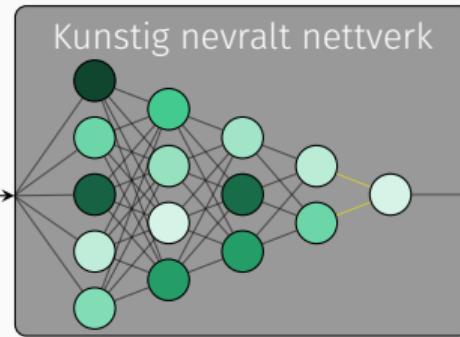
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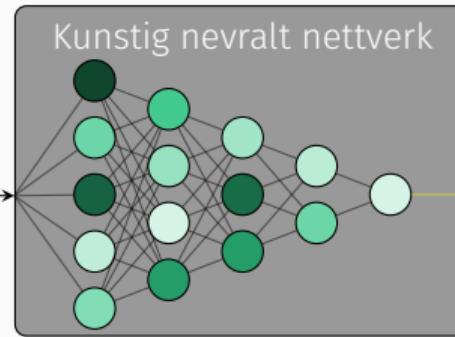
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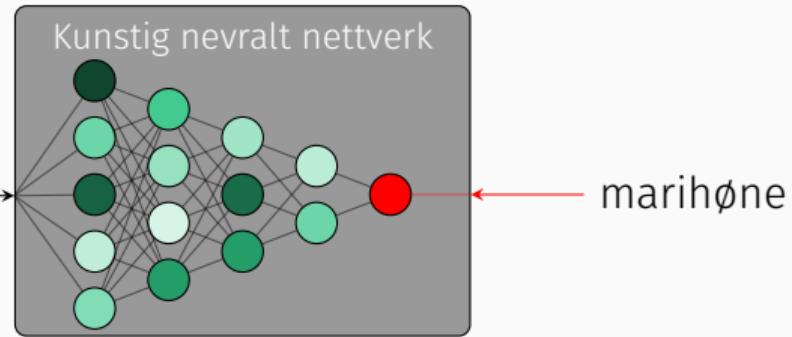


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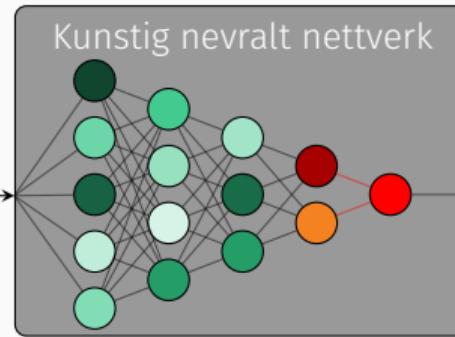


marihøne

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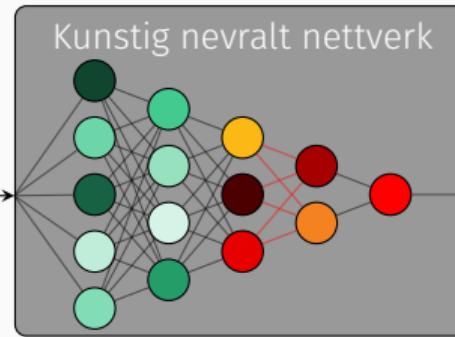


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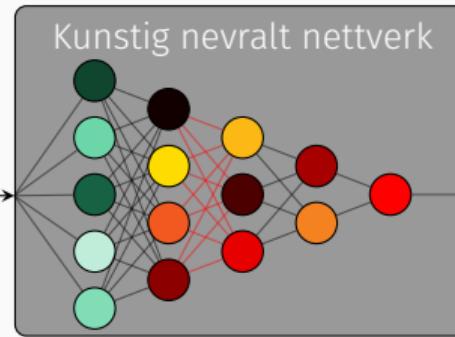
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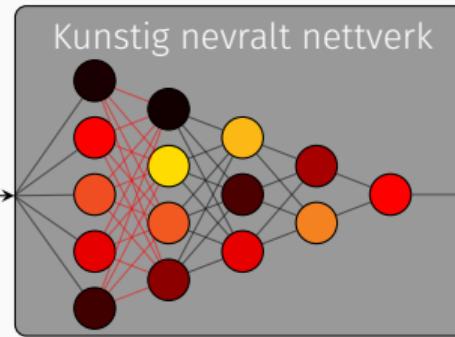
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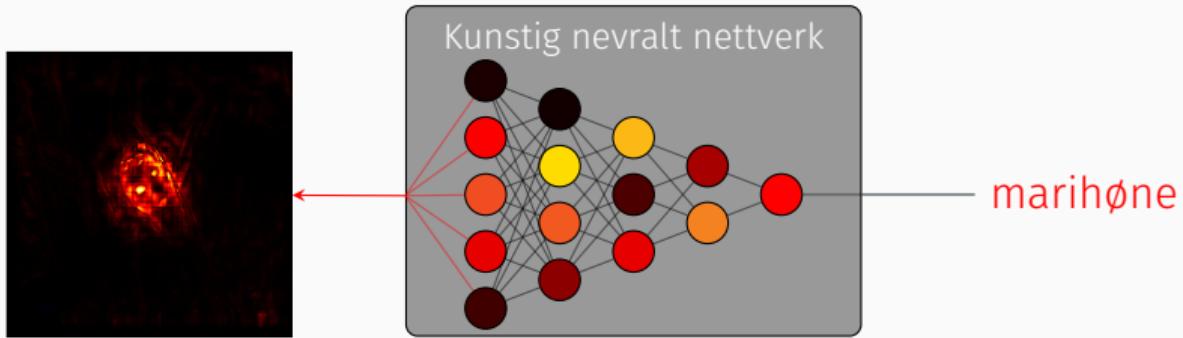
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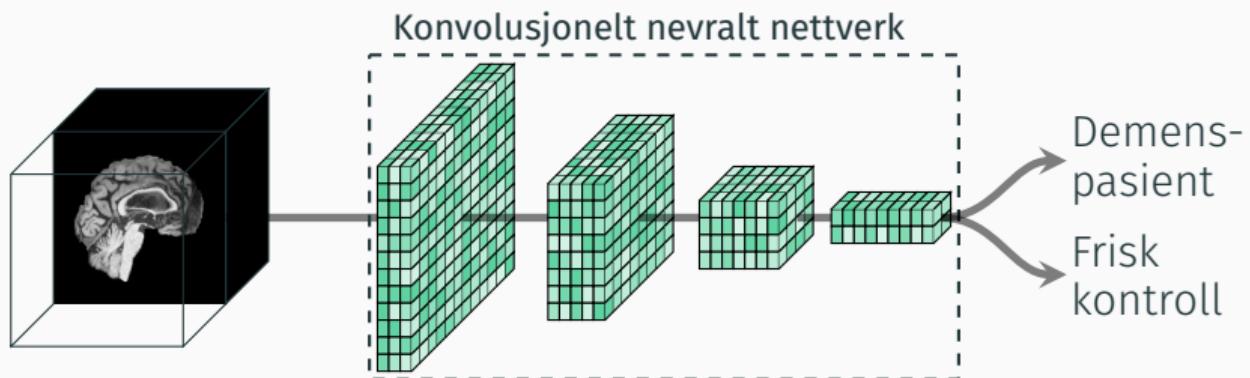


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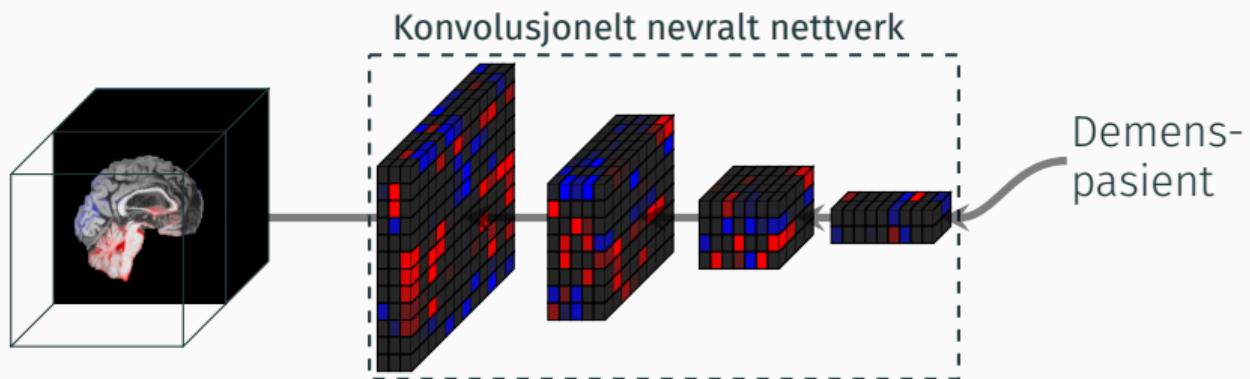
# Forklarbar kunstig intelligens og demens



Esten H. Leonardsen et al., Constructing personalized characterizations of structural brain aberrations in patients with dementia using explainable artificial intelligence. *npj Digital Medicine* (2024)



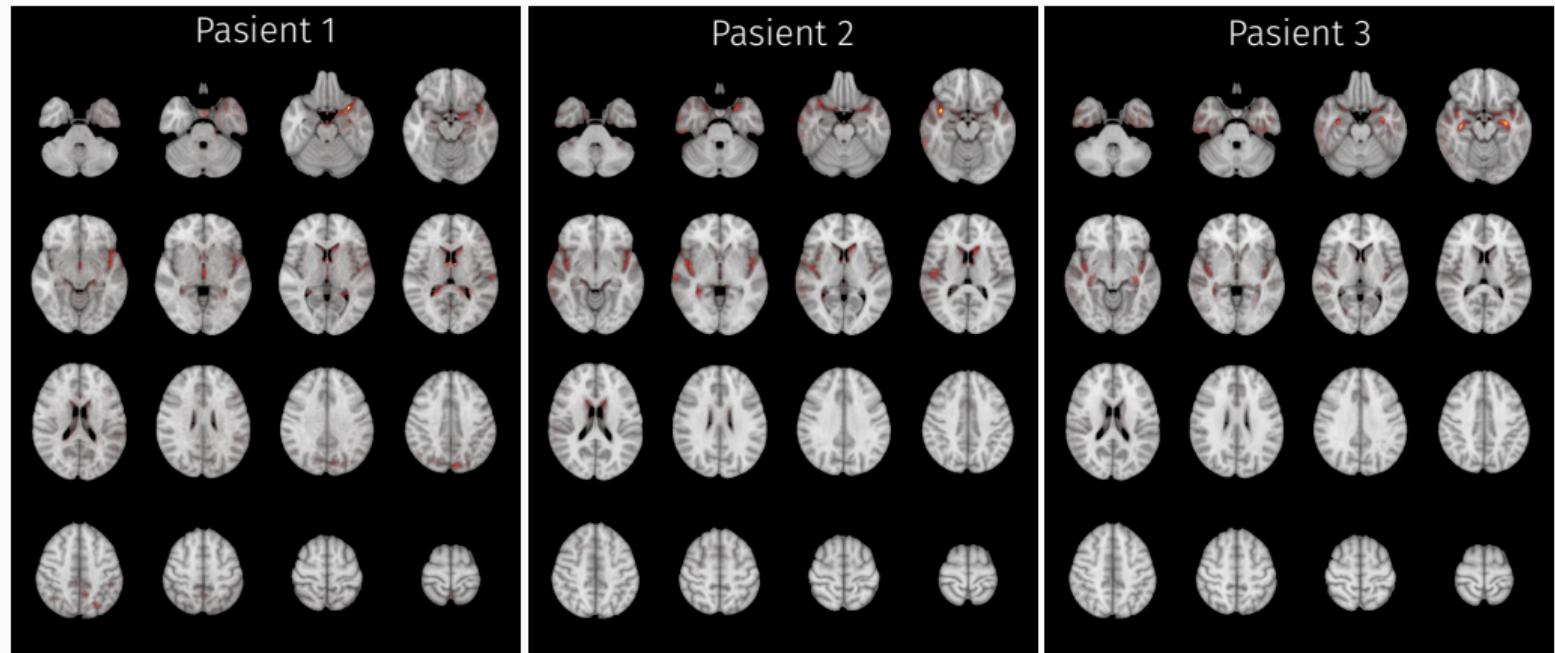
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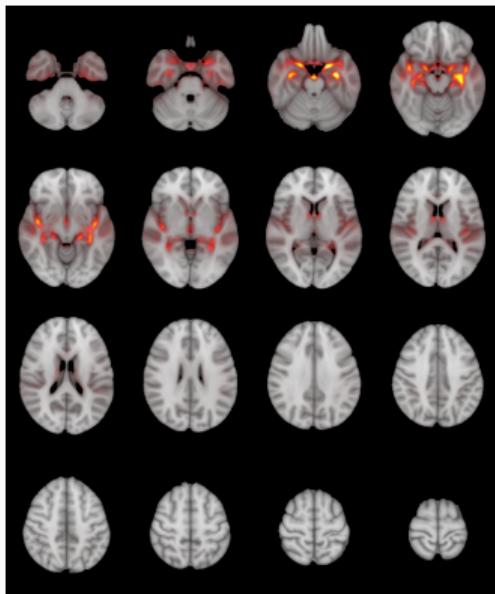


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## Forklarbar KI

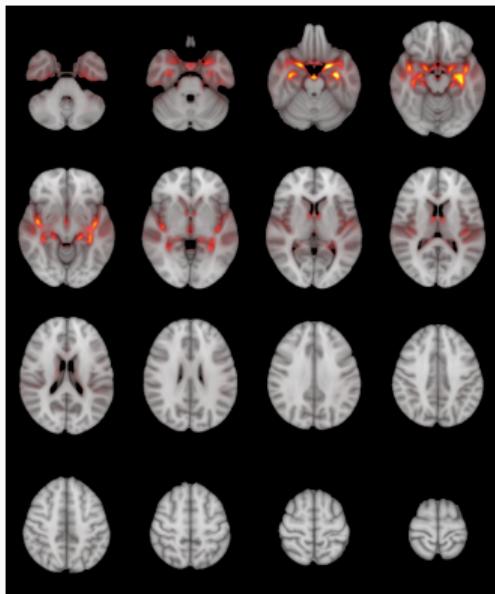


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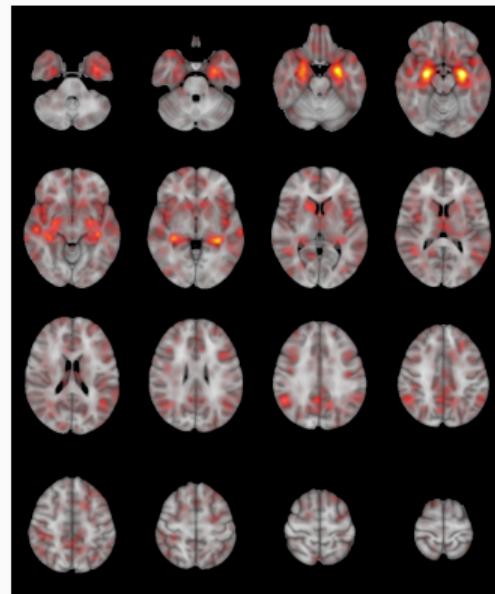


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Forklarbar KI



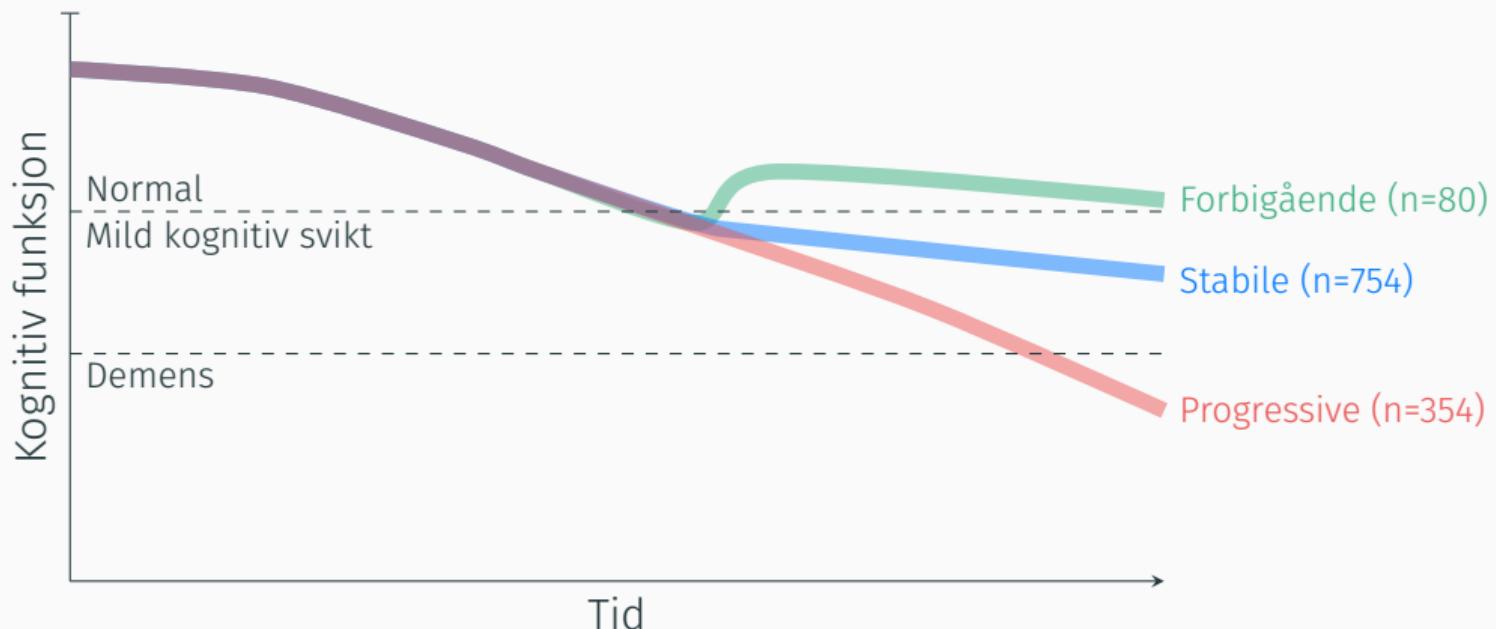
Mennesker



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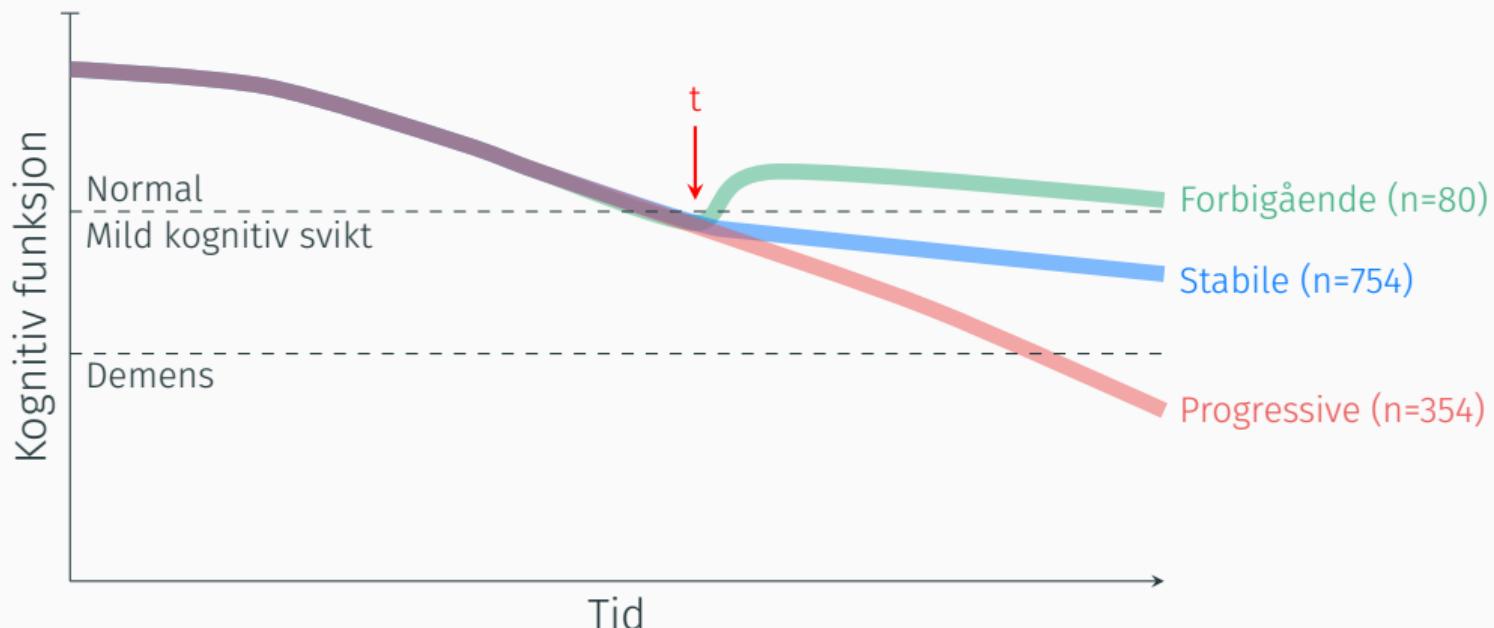
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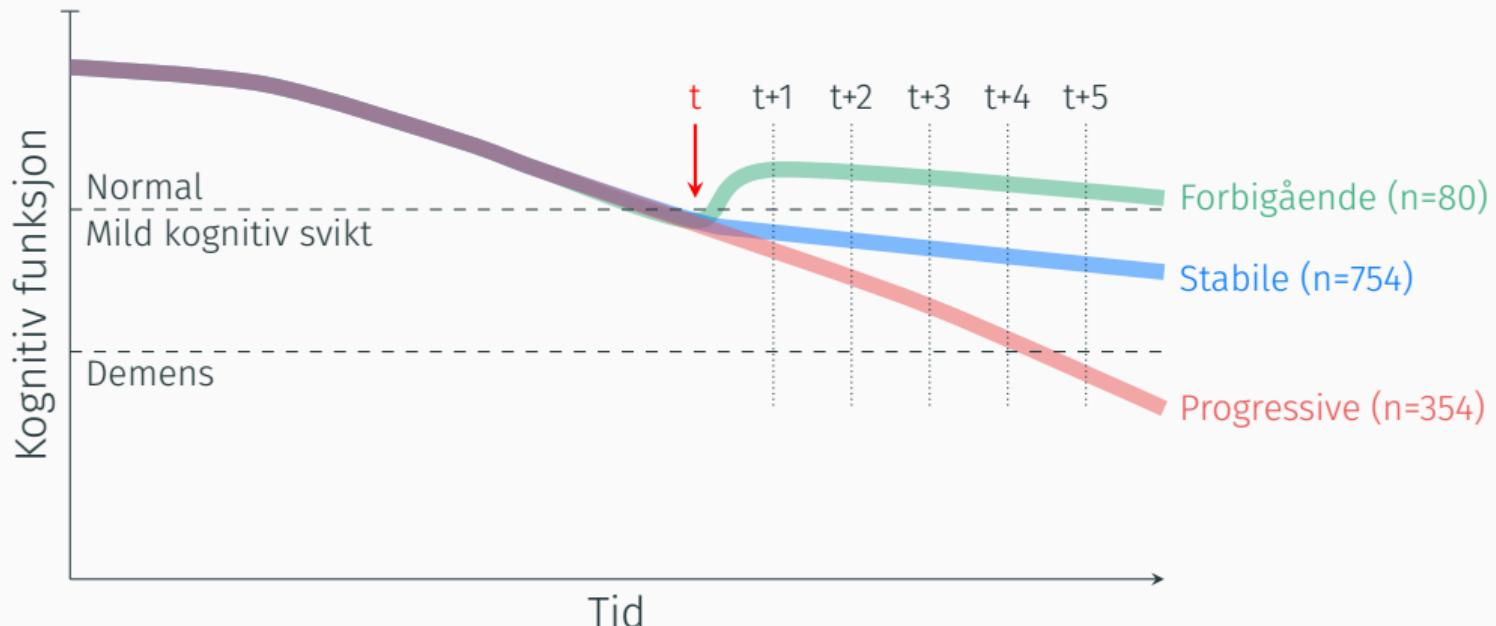
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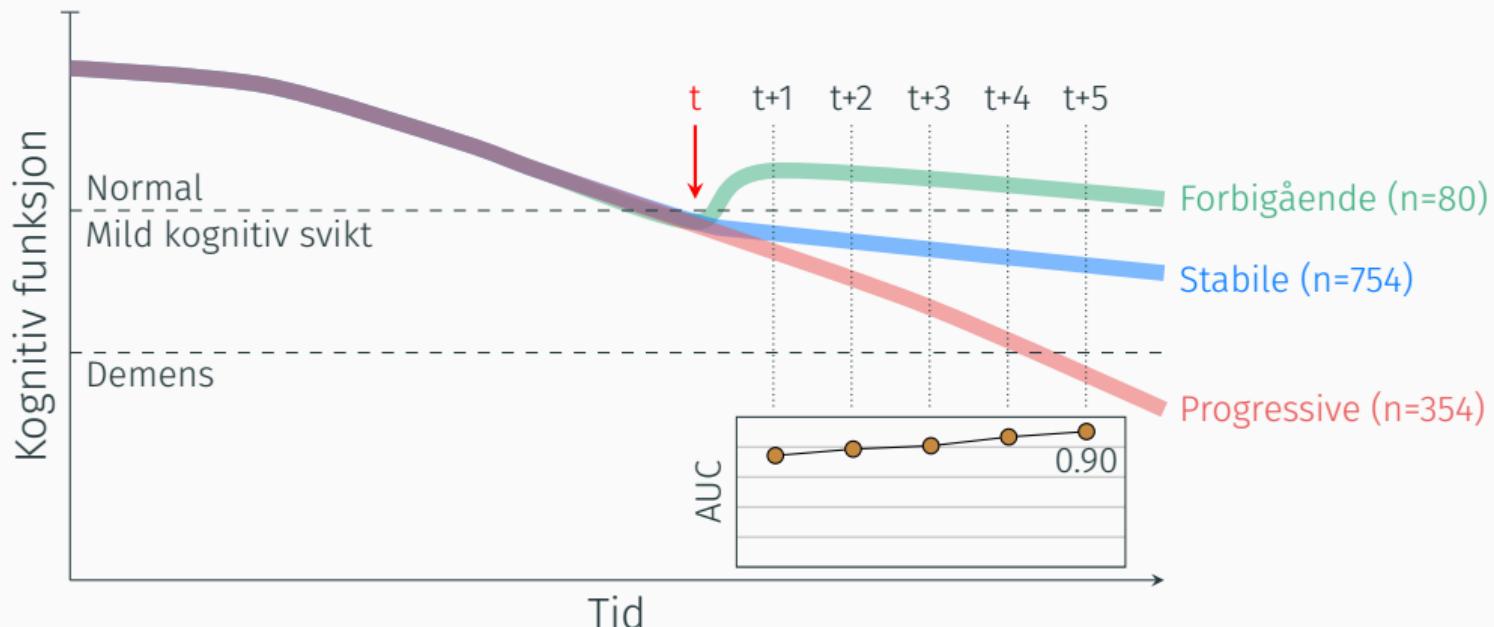
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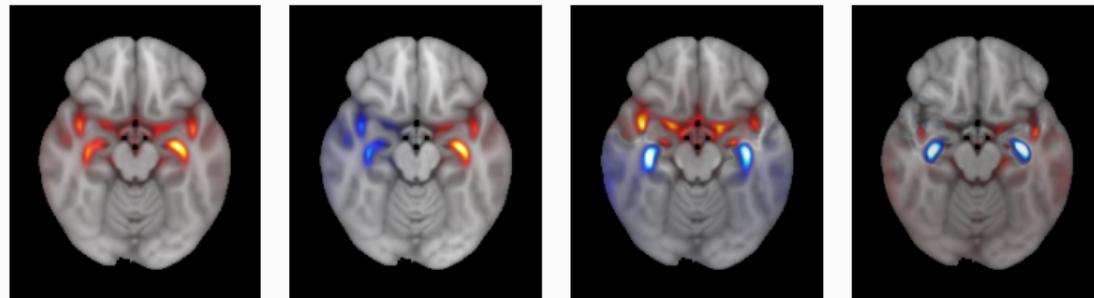
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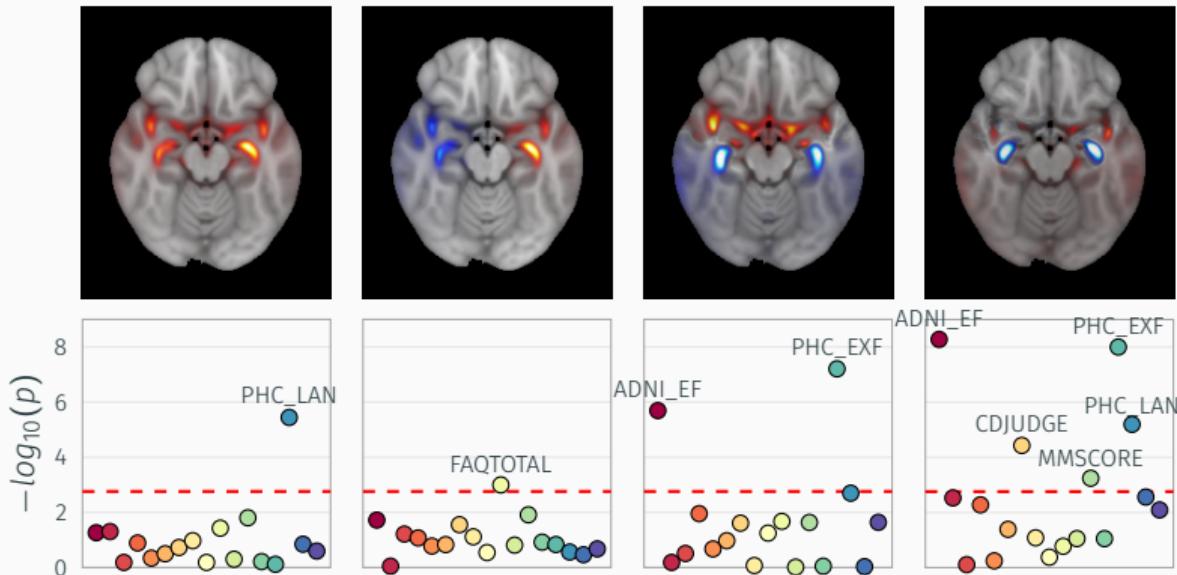
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Takk for oppmerksomheten!  
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