## **VII. Summary**

Neurodegenerativ diseases comprise a great number of diseases of which the causes are mostly unknown and whose consequences are the degeneration of selective neuronpolpulations. Due to the lack of knowledge concerning the changes causing the diseases, most of these diseases do not have specific diagnos methods..

The aim of this thesis was the genexpressionanalysis of neurodegenerative diseases in order to further understand the underlying biological processes. This knowledge should further enable the identification of targets for the development of diagnostic and therapeutic strategies. To allow the examination of different diseases and disease states, fokal Ischemia as an acute and Alzheimers Disease as an chronic neurodegenerative disease were analysed.

Our results could show that both analysed diseases comprised biological processes of neuroinflammation and apoptosis. Furthermore both diseases did show involvement of proliferatory as well as celladhesion processes which backup the hypothesis of neuroregenerative processes in these diseases.

The comparison of acute and chronic neurodegeneration showed the stronger involvement of neuroinflammation in acute diseases whereas neuroregeneration proves to be strang in both diseases.

This thesis therefore includes different targets which might be promising strategies for further research concerning neurodegenerative diseases.