# Summary

## Therapeutic applications of monoclonal antibodies (in oncologic indications)

### Background

Monoclonal antibodies (Mab) are one of the possible means of treating oncological diseases. This thesis aims to summarize basic information about them and provide an overview of all antitumour monoclonal antibodies registered in the Czech Republic, whose stage III studies had been concluded before December 31, 2008.

### Main findings

An overview of concluded stage three studies of all registered indications for seven tumour antibodies have been created including alemtuzumab, bevacizumab,
cetuximab, ibritumomab tiuxetan, panitumumab, rituximab and trastuzumab. Considering the brief use of Mab in the medical practice, many of the studies have not been finished or their results are still to be published.
Judging from the overview, the scope of indication of some monoclonal antibodies rises depending on the duration of their use. At the beginnings of therapeutic use, mainly for ethical reasons, monoclonal antibodies were applied to patients with later stages of the disease. The increasing amount of information on effectiveness and safety of the treatment as part of the research has enabled the use of biological treatment in earlier stages of tumour diseases and also in the adjuvant therapy. In comparison with the existing chemotherapy, Mab have often demonstrated better therapeutic effects. Greater effectiveness together with a lower number of untoward effects play a major role in improving the patients‘ quality of life.

### Conclusion

Introducing monoclonal antibodies into the therapy of tumour diseases have signalled a turning point in their treatment. At present, the main problem regarding the monoclonal antibidies is their high price and the constant search for the ways in which they could be included in the therapeutic practice.