The topic of the thesis I have chosen in relation to their possible future careers in radiology or nuclear medicine. I was therefore closer acquainted with the text Atomic Act, with aspects of work with ionizing radiation, the effects of ionizing radiation on the human body and the resulting potential risks to the profession and to patients.

This work is focused in its general part on the effects of ionizing radiation on the human organism on the defensive and reparative abilities and the damage observed on genetic, molecular and somatic level.

In the practical part of the thesis I focused on the perceived risk iatrogenic damage in the context of screening.