Abstract:
The advent of individualized medicine with novel guidelines, extended quality assessment as well as intensified conventional, immunohistochemical, and molecular characterization of diseases has led to a substantial increase of pathologists' workload. Furthermore, in industrialized countries, we are facing the challenges of demographic change with an aging population. This raises the question of how pathology will be affected by these developments in the future. We extracted German population data and data on the number of board-certified physicians and pathologists from official sources. These data were reviewed in the light of data on caseload, case complexity, auxiliary diagnostic procedures, and matching patient data from a large German pathology department serving as a sector independent regional service provider. The refinement of diagnostic procedures over the last decade has resulted in a 60% increase in slide numbers per case, doubling of immunohistochemistry procedures, and more than tripling of molecular analyses. Correlation of this development to demographics suggests that an aging population will further increase the caseload and case complexity in the coming decades since patient age is tightly linked to both parameters. This development is currently not accompanied by a sufficient increase
in the number of pathologists. Our data point toward an imbalance between the increase in pathology workload and the number of pathologists. Extrapolations suggest a further aggravation of this development in the future. Thus, healthcare systems need to address this problem urgently in order to cope with these challenges.