Record Nr. UNINA9910456527103321 Autore Sztefko Krystyna Titolo Immunodiagnostics and patient safety [[electronic resource] /] / Krystyna Sztefko Berlin,: De Gruyter, c2011 Pubbl/distr/stampa **ISBN** 1-283-16628-3 9786613166289 3-11-024948-0 Descrizione fisica 1 online resource (176 p.) Collana Patient safety: v. 3 Disciplina 616.07/56 Soggetti **Immunoassay** Patients - Safety measures Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Immunochemical methods: basic principle and definitions --Immunoassay standardization -- Immunoassay calibration and calibration curve-fitting -- Reference intervals and immunoassay --Laboratory pre-analytical and analytical phase of immunoassay --Human natural antibodies and immunoassay -- Immunoassay interferences: how to recognize, eliminate, or reduce them --Immunoassay and patient safety. Sommario/riassunto Today most of immunochemistry methods for the determination of proteins, peptides, drugs, and many small molecules are fully automated, with good precision, excellent sensitivity and short reaction time. However, inaccuracy due to poor standardization and the presence of interfering substances in biological samples is still a serious and life-threatening issue. Proper validation of methods and

quality assurance have little effect on frequency of occurrence of false positive or false negative results, which, if unrecognized, may lead to patient's misdiagnosis, unnecessary treatment or even unnecessary surgery. Deep knowledge of basic principles of immunochemical methods (antigen-antibody reaction, standardization, matrix effect, limit of detection, cross-reactivity, etc.), sources of analyteindependent interferences (preanalitycal errors, the presence of binding proteins, the presence of autoantibodies) and analyte-dependent interferences (presence of heterophilic antibodies, high-dose effect) are very important to understand, detect, reduce and/or eliminate the interferences. This book helps to reduce false results and, at the same time, improve patient's care and patient's safety.