

Contents

Special Issue: Information and Communication Technologies in Laboratory Medicine

Guest Editor: Andreas Bietenbeck

Editorial

Andreas Bietenbeck and Thomas Ganslandt
Shaping the digital transformation of laboratory medicine — 215

Articles

Sebastian H. Eck
Challenges in data storage and data management in a clinical diagnostic setting — 219

Guido Freckmann and Jochen Mende
Continuous glucose monitoring: data management and evaluation by patients and health care professionals – current situation and developments — 225

Matthias Orth, Frank Bühling and Georg Hoffmann
Long-term medical data storage: challenges with test results obtained by direct-to-consumer testing — 235

Ulrich M. Gassner, Julian N. Modi, Alexander Ponader and Simone Ruf
Legal aspects of storage and transmission of laboratory results — 243

Fried-Michael Dahlweid, Matthias Kämpf and Alexander Leichtle
Interoperability of laboratory data in Switzerland – a spotlight on Bern — 251

Stefan Sabutsch and Gerhard Weigl
Using HL7 CDA and LOINC for standardized laboratory results in the Austrian electronic health record — 259

Andreas Bietenbeck, Martin Boeker and Stefan Schulz
NPU, LOINC, and SNOMED CT: a comparison of terminologies for laboratory results reveals individual advantages and a lack of possibilities to encode interpretive comments — 267

Roland Kammergruber and Jürgen Durner
Laboratory information system and necessary improvements in function and programming — 277

Linda M. Thienpont and Dietmar Stöckl
Percentiler and Flagger – low-cost, on-line monitoring of laboratory and manufacturer data and significant surplus to current external quality assessment — 289

Rae-Anne Hardie, Donna Moore, Derek Holzhauser, Michael Legg, Andrew Georgiou and Tony Badrick
Informatics External Quality Assurance (IEQA) Down Under: evaluation of a pilot implementation — 297

Acknowledgment — 305