

Resource table of relevant quality related documents (C-AQ)

	<b>Pre- and post-analytical</b>	<b>Internal quality control</b>	<b>External quality assessment</b>
<b>Standards</b>	ISO 15189	ISO 15189	ISO 17043 Guidelines EQAP 3
<b>Recommendations</b>	<p>IFCC Part 1 CLSI H03-A6 venipuncture NCCLS H18-A3 Blood Specs IFCC ref valPart1-5 CLSI C28-A3 ref int</p> <p>Lippi G, Banfi G, Church S, Cornes M, De Carli G, Grankvist K, Kristensen GB, Ibarz M, Panteghini M, Plebani M, Nybo M, Smellie S, Zaninotto M, Simundic AM; Preanalytical <b>quality</b> improvement. In pursuit of harmony, on behalf of European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working group for Preanalytical Phase (WG-PRE). European Federation for Clinical Chemistry and Laboratory Medicine Working Group for Preanalytical Phase. Clin Chem Lab Med. 2015 Feb 1; 53(3):357-70</p>	<p>Büttner J, Broth R, Broughton PM, Bowyer RC. International federation of clinical chemistry. Committee on standards. Expert panel on nomenclature and principles of quality control in clinical chemistry. <b>IFCC</b> document stage 2, draft 3; 1979-07 with a view to an <b>IFCC</b> recommendation. Quality control in clinical chemistry. Part 4. Internal quality control. J Clin Chem Clin Biochem. 1980 Aug; 18(8):535-41.</p> <p>International Federation of Clinical Chemistry, Scientific Committee Expert Panel on Nomenclature and Principles of Quality Control in Clinical Chemistry. Approved recommendation (1979) on quality control in clinical chemistry. Part 3. Calibration and control materials. Büttner J, Borth R, Boutwell JH, Broughton PM, Bowyer RC. J Clin Chem Clin Biochem. 1980 Nov; 18(11):855-60.</p> <p>International Federation of Clinical Chemistry. Committee on Standards. Expert Panel on Nomenclature and Principles of Quality Control in Clinical Chemistry. Approved recommendation (1978) on quality control in clinical chemistry. Part 1. General principles and terminology. Büttner J, Borth R, Boutwell JH, Broughton PM, Bowyer RC. Clin Chim Acta. 1979 Oct 15; 98(1-2):129F-143F</p> <p>Clinical and Laboratory Standards Institute (CLSI) C24A3</p>	<p>Fundamentals</p> <p>Büttner J, Borth R, Boutwell JH, Broughton PM, Bowyer RC. Approved recommendation (1983) on quality control in clinical chemistry. Part 3. External quality control. J Clin Chem Clin Biochem. 1983 Dec; 21(12):885-92</p>

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<b>Documents</b>	AACB checklist  EFLM	AACB checklist	
<b>Publications</b>	<p>Plebani M, Astion ML, Barth JH, Chen W, de Oliveira Galoro CA, Escuer MI, Ivanov A, Miller WG, Petinos P, Sciacovelli L, Shcolnik W, Simundic AM, Sumarac Z. Harmonization of quality indicators in laboratory medicine. A preliminary consensus. Clin Chem Lab Med. 2014 Jul; 52(7):951-8</p> <p>Plebani M, Sciacovelli L, Aita A, Chiozza ML. Harmonization of pre-analytical quality indicators. Biochem Med (Zagreb). 2014 Feb 15; 24(1):105-13.</p> <p>Lippi G, Becan-McBride K, Behúlová D, Bowen RA, Church S, Delanghe J, Grankvist K, Kitchen S, Nybo M, Nauck M, Nikolac N, Palicka V, Plebani M, Sandberg S, Simundic AM. Preanalytical quality improvement: in quality we trust. Clin Chem Lab Med. 2013 Jan; 51(1):229-41</p> <p>Plebani M, Quality Indicators to Detect Pre-Analytical Errors in Laboratory Testing Clin Biochem Rev. 2012 August; 33(3): 85-88</p>	<p>Kinns H, Pitkin S, Housley D, Freedman DB. Internal quality control: best practice. J Clin Pathol. 2013 Dec;66(12):1027-32</p> <p>Westgard JO. Statistical quality control procedures. Clin Lab Med. 2013 Mar; 33(1):111-24</p> <p>Westgard JO. Internal quality control: planning and implementation strategies. Ann Clin Biochem. 2003 Nov; 40(Pt 6):593-611</p> <p>Petersen PH, Ricós C, Stöckl D, Libeer JC, Baadenhuijsen H, Fraser C, Thienpont L. Proposed guidelines for the internal quality control of analytical results in the medical laboratory. Eur J Clin Chem Clin Biochem. 1996 Dec; 34(12):983-99.</p>	<p>James D, Ames D, Lopez B, Still R, Simpson W, Twomey P. External quality assessment: best practice. J Clin Pathol. 2014 Aug; 67(8):651-5.</p> <p>Jansen R, Jassam N, Thomas A, Perich C, Fernandez-Calle P, Faria AP, Correia H, Barth JH, Weykamp C, Cobbaert C, Thelen M, Ricós C. A category 1 EQA scheme for comparison of laboratory performance and method performance: An international pilot study in the framework of the Calibration 2000 project. Clin Chim Acta. 2014 May 15; 432:90-8.</p> <p>Kristensen GB, Aakre KM, Kristoffersen AH, Sandberg S. How to conduct External Quality Assessment Schemes for the pre-analytical phase? Biochem Med (Zagreb). 2014 Feb 15; 24(1):114-22.</p> <p>Miller WG, Jones GR, Horowitz GL, Weykamp C. Proficiency testing/external quality assessment: current challenges and future directions. Clin Chem. 2011 Dec; 57(12):1670-80.</p> <p>Miller WG. Specimen materials, target values and commutability for external quality assessment (proficiency testing) schemes. Clin Chim Acta. 2003 Jan; 327(1-2):25-37</p>

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	<p>Sciacovelli L, O'Kane M, Skaik YA, Caciagli P, Pellegrini C, Da Rin G, Ivanov A, Ghys T, Plebani M; IFCC WG-LEPS. Quality Indicators in Laboratory Medicine: from theory to practice. Preliminary data from the IFCC Working Group Project "Laboratory Errors and Patient Safety". Clin Chem Lab Med. 2011 May; 49(5):835-44.</p> <p>Sciacovelli L, Plebani M. The <b>IFCC</b> Working Group on laboratory errors and patient safety. Clin Chim Acta. 2009 Jun;404(1):79-85</p> <p>Bonini P, Plebani M, Ceriotti F, Rubboli F. Errors in laboratory medicine. Clin Chem. 2002 May; 48(5):691-8.</p>		<p>Libeer JC, Baadenhuijsen H, Fraser CG, Petersen PH, Ricós C, Stöckl D, Thienpont L. Characterization and classification of external quality assessment schemes (EQA) according to objectives such as evaluation of method and participant bias and standard deviation. External Quality Assessment (EQA) Working Group A on Analytical Goals in Laboratory Medicine. Eur J Clin Chem Clin Biochem. 1996 Aug; 34(8):665-78.</p> <p>Vives Corrons JL, Van Blerk M, Albarède S, Gutierrez G, Heller S, Nordin G, Skitek M, Deom A, Horváth K, De la Salle B, Libeer JC. Guidelines for setting up an external quality assessment scheme for blood smear interpretation. Part II: survey preparation, statistical evaluation and reporting. Hematology Working Group of the European External Committee for External Quality Assurance Programmes in Laboratory Medicine (EQALM), Clin Chem Lab Med. 2006;44(8):1039-43</p> <p>Guidelines for setting up an external quality assessment scheme for blood smear interpretation. Part I: survey preparation, statistical evaluation and reporting. Hematology Working Group of the European External Committee for External Quality Assurance Programmes in Laboratory Medicine (EQALM) Clin Chem Lab Med. 2006;44(8):1039-43</p> <p>Role of external quality assurance schemes in assessing and improving quality in medical laboratories. Libeer JC. Clin Chim Acta. 2001 Jul 20; 309(2):173-7.</p>

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			<p>Characterisation and evaluation of external quality assessment scheme serum. Discussion paper from the European External Quality Assessment (EQA) Organisers Working Group C. Middle JG, Libeer JC, Malakhov V, Penttilä I. Clin Chem Lab Med. 1998 Feb; 36(2):119-30</p> <p>External quality assessment of clinical laboratories in the United Kingdom. Whitehead TP, Woodford FP. J Clin Pathol. 1981 Sep; 34(9):947-57.</p>
<p><b>Educational materials</b></p> <p><a href="http://www.ifcc.org/ifcc-education-division/emd-committees/c-aq/c-aq-publications-and-resources/">http://www.ifcc.org/ifcc-education-division/emd-committees/c-aq/c-aq-publications-and-resources/</a></p>	<p>Quality of Management &amp; Quality of Analysis. A Handbook for developing Countries</p> <p>EQAP Version 3 (document on competence)</p>	<p>Quality of Management &amp; Quality of Analysis. A Handbook for developing Countries</p>	<p>Procedure for planning an EQA Scheme</p> <p>Fundamentals for External Quality Assessment (EQA)</p> <p>EQA set up checklist</p> <p>Directory of EQA Services</p>
<p><b>Presentations</b></p> <p><a href="http://www.ifcc.org/ifcc-education-division/emd-committees/c-aq/c-aq-publications-and-resources/">http://www.ifcc.org/ifcc-education-division/emd-committees/c-aq/c-aq-publications-and-resources/</a></p>		<p>Internal Quality Control (QC) for Medical Laboratories: An Introduction</p>	<p>The Principles of External Quality Assurance</p>
<p><b>Other Links</b></p>	<p><a href="https://www.westgard.com/pre-and-post-analytical-quality.htm">https://www.westgard.com/pre-and-post-analytical-quality.htm</a></p> <p><a href="http://www.who.int">http://www.who.int</a></p>	<p><a href="http://www.westgard.com/lessons-basic-qc-practices.htm">http://www.westgard.com/lessons-basic-qc-practices.htm</a></p> <p><a href="http://www.who.int">http://www.who.int</a></p>	<p><a href="http://www.ieqas.org.uk/">http://www.ieqas.org.uk/</a></p> <p><a href="http://www.eqalm.org/">http://www.eqalm.org/</a></p> <p><a href="http://www.who.int">http://www.who.int</a></p>
<p><b>Course materials</b></p>	<p><a href="http://www.ifcc.org/ifcc-education-division/webinars/">http://www.ifcc.org/ifcc-education-division/webinars/</a></p>	<p><a href="http://www.ifcc.org/ifcc-education-division/webinars/">http://www.ifcc.org/ifcc-education-division/webinars/</a></p>	<p><a href="http://www.ifcc.org/ifcc-education-division/webinars/">http://www.ifcc.org/ifcc-education-division/webinars/</a></p>