Clinical Chemistry Cited in Nearly 20,000 Articles during 2006

The newly released Journal Citation Reports (JCR) shows that Clinical Chemistry was cited 19,949 times during 2006 in articles published in the journals covered by JCR. This number of citations is an all-time high for the journal, surpassing the previous high of 18,052 in 2005. Clinical Chemistry was the most frequently cited journal in the field, with the next highest journal having been cited 7,470 times.

As in past years, Clinical Chemistry also has the highest impact factor in the field. The 2006 impact factor is 5.454, with the next highest journal at 3.032. The new impact factor for Clinical Chemistry cannot be compared with the 2005 impact factor because the way it was determined has changed. (Under the old calculation method, the 2006 impact factor is about 8.1.) As with laboratory workload statistics, changes in counting require a new baseline for monitoring trends. The new baseline will not be known until next year because the calculation covers a 2-year period. But that is a fine point.

The important news is that citations of Clinical Chemistry continue to increase, as does use of articles at the web site (see below), reflecting the continuing importance of the work you do.

Clinical Chemistry, by the Numbers, Numbers, Numbers

For 2006, 1,523 manuscripts were submitted (a new high). The US accounted for the highest proportion of the submitted papers (22%), followed by Germany (8.7%), Italy (7.1%), China (5.2%), and The Netherlands (4.8%). The most common keyword was “immunoassay” (n = 39), just ahead of HPLC (n = 38). An average (mean) of 1.9 reviewers examined each manuscript.

It took an average of 6 days to choose the reviewers and for the required number of reviewers to agree to review. The average time for a reviewer to complete a review was 11 days, but nearly twice that time was required for all reviews to be received on the average paper. The average time from submission to the first decision letter was 21.6 (calendar) days. For first revisions of manuscripts, the mean time from submission to a decision was 20.4 days, decreasing to 9.3 days for later revisions. For submitted manuscripts of all types, including Letters to the Editor, 29.1% were declined after examination by 2 or more editors, 36.7% were declined following external review, and 30.1% have been accepted after external review. The acceptance rate for manuscripts submitted as full articles was 21.6%.

The accepted manuscripts filled most of the 2,326 printed pages of the journal. The on-line journal was accessed by 1,143,526 distinct “hosts” (such as Harvard University or my home computer); for comparison, it was accessed by 302,493 distinct hosts in 2003. The “hosts” requested 1,242,380 Mbytes, up from 4,244,594 requests in 2003) and transferred 1,242,380 Mbytes, up from 198,662 Mbytes in 2003.

It was a busy year—and the best is yet to come.

Graham Beastall, Commander of the British Empire

Dr. Renze Bais sends the following news:

On Friday, June 15, 2007, Dr. Graham Beastall, BSc, PhD, CSci, EurClinChem, FRCPath, FRCP(Glas), was named in the Queens’ Birthday Honours List and awarded a CBE for services to the profession. This award is a prestigious honour for 1 of our colleagues.

Graham Beastall is a Consultant Clinical Scientist and Clinical Lead for the 4-site Department of Clinical Biochemistry in the North Glasgow Division of NHS Greater Glasgow. This department offers more than 12 million core and specialist biochemical tests each year and employs 145 people (mainly Healthcare Scientists). Graham’s specialist interests are in biochemical endocrinology, evidence-based medicine, and service modernization.

Graham is President of the Association for Clinical Biochemistry (ACB) from 2006–2009. He served as Vice President of the Royal College of Pathologists (RCPath) from 2002–2005 (the first clinical scientist to do so); he is a current member of the Scottish Council of the RCPath; and he represents the RCPath on the Scottish Forum for Healthcare Science. Graham has worked closely with the Chief Scientific Officer in the Department of Health (England) on the Healthcare Science Career Framework.

We at Clinical Chemistry send our congratulations and very best wishes.

The following Consensus Statement was provided to us by Jocelyn Hicks. It is reproduced as provided to us:

Consensus Statement on the Worldwide Standardization of the Hemoglobin A1c Measurement

American Diabetes Association (ADA), European Association for the Study of Diabetes (EASD), International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), and International Diabetes Federation (IDF)

The Hemoglobin A1c (A1C) assay has become the gold-standard measurement of chronic glycemia for over 2 decades. Anchored in the knowledge that increased A1C values increase the likelihood of the microvascular complications of diabetes (and perhaps macrovascular complications as well), clinicians have used A1C test results to guide treatment decisions, and the assay has become the cornerstone for the assessment of diabetes care.

The clinical world has assumed that the A1C assay reflects average
glycemia over the preceding few months. However, the data supporting that premise are not exceptionally robust (1–5); glucose concentrations were not measured frequently enough to compute a true “average.” To gain a better understanding of the relationship between A1C and average blood glucose, an international study has been initiated to document this relationship, using frequent capillary measurements and continuous glucose monitoring. The results of this study will be known around September 2007. Although some clinicians are already providing patients with their “average blood glucose”, by simply converting the current A1C test results (6) to a term more relevant to the values obtained from patient self-monitoring, the results of the study will hopefully provide a more accurate conversion algorithm.

Based on the work of the National Glycohemoglobin Standardization Program (NGSP) in the United States and other similar programs in other parts of the world, the current A1C assay has been harmonized on reference methods that measure a mixture of glycohemoglobins (7–9). However, to achieve a more uniform standardization of A1C measurements, it is desirable to have a reference method that measures only a well-defined analyte. Accordingly, after several years of work, the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) developed a new reference method that specifically measures the concentration of only 1 molecular species of glycated A1C (10, 11). Results by the new reference method have also been compared to the results obtained by current methods. The impact of both changes proposed by IFCC would be to significantly change the numeric results provided to clinicians. For example, an A1C value of 5% would become ~33 mmol/mol, and an 8% would be ~65 mmol/mol.

What Are the Implications of the Above Activities?

The advent of a new reference method to standardize the A1C results, along with the anticipated documentation that the assay does indeed indicate average blood glucose, has led to a variety of proposed changes in the reporting of A1C test results worldwide. To reach an agreement on a course of action, a meeting was held in Milan, Italy, on May 4, 2007, at which a consensus agreement emerged. The following statements have been approved by the American Diabetes Association, European Association for the Study of Diabetes International Diabetes Federation, and IFCC.

1. A1C test results should be standardized worldwide, including the reference system and results reporting.

2. The new IFCC reference system for A1C represents the only valid anchor to implement standardization of the measurement.

3. A1C results are to be reported worldwide in IFCC units (mmol/mol) and derived NGSP units (%), using the IFCC-NGSP master equation.

4. If the ongoing “average plasma glucose study” fulfills its a priori specified criteria, an A1C-derived average glucose (ADAG) value calculated from the A1C result will also be reported as an interpretation of the A1C results.

5. Glycemic goals appearing in clinical guidelines should be expressed in IFCC units and derived NGSP units and as ADAG.

All the organizations agreeing with this consensus statement propose that these recommendations be implemented globally as soon as possible. We believe this agreement will further contribute to the worldwide comparability of A1C results, paralleling the progress of scientific knowledge related to the analytical and biochemical features of A1C testing. Expressing test results in scientifically correct units along with a clinically relevant interpretation of those results is not an uncommon practice (e.g., creatinine and estimated glomerular filtration rate). Consequently, clinicians will have the opportunity to convey the concept of chronic glycemia in terms and units most suitable to the patients under their care.

Consensus Committee

For IFCC: Jocelyn Hicks, PhD, Mathias Muller, MD, Mauro Pantezghini, MD, PhD, Garry John, PhD

For ADA: Larry Deeb, MD, John Buse, MD, PhD, David M. Nathan, MD, Richard Kahn, PhD

For EASD: Ele Ferrannini, MD, Robert Heine, MD

For IDF: Martin Silink, MD, Jean-Claude Mbanya, MD

References


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