

Chapter IV

Working sessions of the Scientific Board

1 Organisation

The French National Observatory for Epidemiology of Bacterial Resistance to Antimicrobials (ONERBA) was founded in 1997 in order to:

- gather and analyse data regarding bacterial resistance to antimicrobials in France, and to compare these data with those obtained in other countries;
- provide data regarding bacterial resistance to antimicrobials to Health Authorities, Scientific Organisations, and health Professionals, upon request;
- promote quality data collection and analysis;
- initiate research on less well-documented issues of public interest;
- participate in training activities associated with the issues noted above, particularly by means of presentations and publications.

In order to meet ONERBA's objectives, a Scientific Board (SB) was created in 1997. A number of the members of the SB were renewed in 2003, as is recommended in ONERBA's statutes. The activities of the SB and its relationship with the networks are described in the charter of the networks represented on the SB of ONERBA (*see chapter V*).

The SB meets during regular working sessions in order to:

- select topics of interest;
- define methods for collection and analysis;
- analyse and validate data;
- implement specific studies.

2 Calendar of the working sessions of the Scientific Board in 2008

February 6, April 2, June 24, September 25, November 20.

3 Summary of the working sessions of the Scientific Board in 2008

A detailed report of the working parties can be found in the French part of this paper.

4 Network and trans studies of ONERBA in 2008

■ Trans-network survey 2008: MRSA producing PVL and TSST1 toxins

ONERBA has set up a 6-months prospective study in 2008 in order to delineate the frequency of PVL- and TSST1-producing MRSA in France. A total of 104 laboratories collected all MRSA strains harboring specific susceptibility patterns and isolated from clinical samples drawn from inpatients and outpatients. MRSA strains had to be susceptible to fluoroquinolones and gentamicin and resistant to fusidic acid (OX_{R} , FA_{R} , FQs, GMs). In addition, strains had to display one of the three susceptibility patterns:

- K_{R} , TMs (ST80 European PVL phenotype);
- K_{R} , TMR (typical TSST1 MRSA phenotype);
- Ks, TMs (phenotype frequently associated with TSST1 MRSA).

The search for toxin genes and molecular typing was performed by the National Reference Centre for Staphylococci (Lyon). The results of the study were presented at the annual session organized by ONERBA at the 2008 RICAI meeting in Paris.

■ EPIVILLE network study

The EPIVILLE-France Network has set up a study between January and April 2008. The private practice laboratories of the network included all *P. aeruginosa* and *A. baumannii* strains isolated in clinical samples from ambulatory patients of patients living in institutions. The aims of the study were as follow:

- to evaluate the prevalence and the frequency of antibiotic resistance of *P. aeruginosa* et *A. baumannii* in outpatients' infections
- to determine the biochemical mechanisms of resistance to β -lactams and aminoglycosides (analysis performed by the Laboratoire de Microbiologie, UFR des Sciences Pharmaceutiques, Bordeaux, C. Quentin/C. Arpin).

5 Sessions organised by ONERBA in National Meetings in 2008

■ ONERBA - RICAI 2008: Bacterial resistance in France, 10 years of surveillance by the ONERBA networks

- Evolution of resistance in *S. aureus* (J.-W. Decousser).
- Multicentre survey 2008: MRSA producing toxins PVL or TSST1 (J. Robert).
- Evolution of resistance in enterobacteria (A. Mérens, J.-Y. Madec).
- Evolution of resistance in non-fermenting Gram negative bacilli (X. Bertrand).

- Antibiotic use and resistance: European management (B. Schlemmer).

■ **ONERBA - JNI 2008 : Vers une résistance XXL ?**

- *Pseudomonas aeruginosa*: data of the ONERBA networks and results of the multicentre survey (X. Bertrand).
- Vancomycin resistant enterococci: data of the ONERBA networks and results of the multicentre survey (N. Fortineau).
- *Mycobacterium tuberculosis*: resistance in France (J. Robert).
- *Mycobacterium tuberculosis* ultra-resistant tuberculosis (XDR): epidemiology and management (N. Véziris).

6

Publications of ONERBA and ONERBA's networks in 2008

■ **Conseil scientifique de l'ONERBA**

Bertrand X, Hocquet D, Costa Y; conseil scientifique de l'ONERBA. *Pseudomonas aeruginosa*: ONERBA network data and results of the 2007 survey. Med Mal Infect. 2008 Jun;38 Suppl 2:S63-4.

Vachée A, Varon E, Jouy E, Meunier D; Conseil Scientifique de l'Onerba. Antibiotics susceptibility of *Streptococcus* and *Enterococcus*: data of Onerba network. Pathol Biol (Paris). 2009 May;57(3):240-4

Fortineau N, Leclercq R, Maugat S, Robert J; Conseil Scientifique de l'ONERBA. Vancomycin-resistant enterococci: ONERBA networks data and results of the national 2006 survey on digestive carriage. Med Mal Infect. 2008 Jun;38 Suppl 2:S65-7(résumé de la RICAI).

■ **Réseau Aquitaine/Epiville**

Dubois V, Arpin C, Dupart V, Scavelli A, Coulange L, André C, Fischer I, Grobost F, Brochet JP, Lagrange I, Dutilh B, Jullin J, Noury P, Larribet G, Quentin C. Beta-lactam and aminoglycoside resistance rates and mechanisms among *Pseudomonas aeruginosa* in French general practice (community and private healthcare centres). J Antimicrob Chemother. 2008 Aug;62(2): 316-23.

■ **CNR Pneumocoque et ORP**

Levy C, Varon E, Bingen E, Picard C, de La Rocque F, Aujard Y, Cohen R; Groupe des pédiatres et microbiologistes de l'Observatoire National des Méningites. *Pneumococcal meningitis* in children in France: 832 cases from 2001 to 2007. Arch Pediatr. 2008 Dec;15 Suppl 3:S111-8.

Anonymous. Recent trends in antimicrobial resistance among *Streptococcus pneumoniae* and *Staphylococcus aureus* isolates: the French experience. Euro Surveill. 2008 Nov 13;13(46). pii: 19035.

Lepoutre A, Varon E, Georges S, Gutmann L, Lévy-Bruhl D. Impact of infant pneumococcal vaccination on invasive pneumococcal diseases in France, 2001-2006. Euro Surveill. 2008 Aug 28;13(35). pii: 18962.

Bingen E, Levy C, Varon E, Lecuyer A, Aujard Y, Cohen R; Groupe des Pédiatres et Microbiologistes de l'Observatoire National

des Méningites. *Pneumococcal meningitis: impact of heptavalent pneumococcal conjugate vaccine*. Arch Pediatr. 2008 Jun;15(5):543-4.

Regional Pneumococcal Observatories. Serotypes and antibiotic susceptibility of *Streptococcus pneumoniae* strains isolated in France in 2005. BEH du 23 décembre 2008, N°51-52.

Rapport d'activité 2008 du CNR des Pneumocoques. (http://www.invs.sante.fr/surveillance/cnr/rapports_activite.htm).

■ **CNR des mycobactéries et de la résistance des mycobactéries aux antituberculeux**

Robert J, Véziris N; réseau Azay-Mycobactérie et le Conseil Scientifique de l'ONERBA. Resistance to antituberculosis drug in France; data provided by the Azay-Mycobacteria network and the National Reference Center on Mycobacteria Med Mal Infect. 2008 Jun;38 Suppl 2:S68-70.

Khuê PM, Mallet A, Véziris N, Jarlier V, Robert J; Azay-Mycobacteria Study Group. Evaluation of data quality in a laboratory-based surveillance of *M. tuberculosis* drug resistance and impact on the prevalence of resistance: France, 2004. Epidemiol Infect. 2008 Sep;136(9):1172-8.

Rapport d'activité 2008 du CNR des Mycobactéries. (<http://cnrmycob.free.fr/spip.php?rubrique6>).

■ **RESAPATH**

Hendriksen RS, Mevius DJ, Schroeter A, Teale C, Jouy E, Butaye P, Franco A, Utinane A, Amado A, Moreno M, Greko C, Stärk KD, Berghold C, Myllyniemi AL, Hoszowski A, Sunde M, Aarestrup FM. Occurrence of antimicrobial resistance among bacterial pathogens and indicator bacteria in pigs in different European countries from year 2002 - 2004: the ARBAO-II study. Acta Vet Scand. 2008 Jun 13;50:19.

Hendriksen RS, Mevius DJ, Schroeter A, Teale C, Meunier D, Butaye P, Franco A, Utinane A, Amado A, Moreno M, Greko C, Stärk K, Berghold C, Myllyniemi AL, Wasyl D, Sunde M, Aarestrup FM. Prevalence of antimicrobial resistance among bacterial pathogens isolated from cattle in different European countries: 2002-2004. Acta Vet Scand. 2008 Jul 8;50:28.

Madec J.-Y, Lazizzera C, Châtre P, Meunier D, Martin S, Lepage G, Ménard MF, Lebret P, Rambaud T. (2008) Prevalence of faecal carriage of acquired third-generation cephalosporin resistance in Enterobacteriaceae from cattle in France. J Clin Microb, 46, 4, 1566-1567.

■ **Réseaux AZAY-Résistance, Ile-de-France et REUSSIR**

Rapport 2008 de l'European Antimicrobial Resistance Surveillance System.

■ **Collège de Bactériologie Virologie Hygiène**

Galas M, Decousser JW, Breton N, Godard T, Allouch PY, Pina P; Collège de Bactériologie Virologie Hygiène (ColBVH) Study Group. Nationwide study of the prevalence, characteristics, and molecular epidemiology of extended-spectrum-beta-lactamase-producing Enterobacteriaceae in France. Antimicrob Agents Chemother. 2008 Feb;52(2):786-9.