A year passes quickly

The time has flown by working on science and research, a central focus of the society. Everything is moving forward quickly and I am happy to have the Scientific Affairs Subcommittee (SAS) and many helpers within the society and the executive office, whose constant support I would like to acknowledge here. Together with all of you, it is fun to get things moving! Many thanks!

Research Grants – an ongoing success story

Last year, I reported on the improvements introduced to render the application and reviewing process more transparent and clearer, for both applicants and reviewers, with the ultimate goal of improving the quality of submissions and reviews. This year we introduced the annual alternation of grant submission topics. So in 2016 the projects only dealt with bacterial infections and diseases, resulting in a noticeable reduction in submissions (from 169 last year to 130 now) allowing us to increase the acceptance rate from 8% to 12%. For 2017 we are looking forward to receiving project submissions focusing on fungal, viral and parasitic infections and diseases. These two project areas will alternate every year. Along with the slightly reduced number of expert reviews required – three independently for each proposal – we were able to avoid the work load for each individual reviewer becoming too much. I would like to give special thanks to all experts and reviewers (listed on pages 66, 67), who have done a tremendous job evaluating the large number of proposals.

Also for the first time, we have allocated some additional funds to one or two excellent projects for which “the reviewers see a great potential and are of the opinion that they merit additional funds to take the topic further” [as stated on our website, www.escmid.org/researchgrants]. Juan Manuel Pericas from Spain submitted the highest scoring project and received a total of EUR 50,000 for his work entitled ‘Experimental and clinical study of the relationship between vancomycin MIC in methicillin-susceptible Staphylococcus aureus (MSSA) and the prognosis of left-sided MSSA infective endocarditis’. We wish him and all other recipients great success with their projects.

In order to illustrate the success of the funded research projects, we have started to list their published outcomes on our website. In 2015 11 articles supported by ESCMID grants were published. Of these, two especially deserve highlighting. The work by Rasmus Hare Jansen, Copenhagen, Denmark, co-funded by an ESCMID Research Grant in 2013, examines mutations in Candida albicans and its adaptation to antifungal exposure [1]. They describe their findings as the “first example of multidrug-resistance emerging in vivo in C. albicans” and concluded that “C. albicans demonstrates a diverse capacity to adapt to antifungal exposure. Potentially novel resistance-inducing mutations in TAC1, ERG11 and ERG2 require independent validation”. Despite the limitations stated in the article, the authors followed the stepwise emergence of multidrug-resistance by analysing Candida in a patient over time and scrutinized the observed changes by susceptibility testing, MLST, gene expression analysis and virulence determination in an insect model. Their novel hypothesized findings are an interesting basis for further studies.

The other article, co-funded by an ESCMID Research Grant 2011 to Thamarai Schneider, Belfast, UK, describes microbial immune evasive strategies contributing to the development and persistence of antimicrobial resistance [2] Thamarai Schneider was previously awarded the New Investigator Research Award from the Medical Research Council to support her research into the intrinsic drug resistance regulator RamA in K. pneumoniae. She has now shown that RamA plays a role “in both protection against antibiotic challenge and also against the innate host immune response thus resulting in Klebsiella that are less susceptible to antibiotics and simultaneously more virulent.” After transcriptional profiling, a number of genetic and regulator binding experiments were done (EMSA & IVT, mutant analyses) plus phenotypic microarray tests for antimicrobial susceptibility. In addition, host-pathogen interactions were studied in vitro (macrophages) and in vivo (mice). This sound investigation has revealed new aspects for further studies.

We will continue to monitor and promote the outcomes of our grant schemes as they strongly motivate us to invest in our young researchers.

Study Groups highly productive – again

As reported last year for 2014 activity, our 28 ESCMID Study Groups (SGs) have continued to be extremely active over the past year (see a list of their main activities on page 21 – 25). Congratulations to all our groups – again! This year, I would like to highlight in particular our Antibiotic Policies Group, ESGAP. It is highly active in a field which needs bright people and strong collaboration. I highly recommend you read their interesting article about their past, present and future on page 20.
ESCMID Sections (subcommittee member responsible)
- Bacteria & Bacterial Diseases (Marek Gniadkowski, Warsaw, PL)
- Fungi & Fungal Diseases (Andreas Groll, Münster, DE)
- Parasites & Parasitic Diseases (Luigi Gradoni, Rome, IT)
- Viruses & Viral Diseases (Adriana Vince, Zagreb, CR)

ESCMID Themes (subcommittee member responsible)
- Pathogenesis & Immunology (Hervé Pelloux, Grenoble, FR)
- Epidemiology, Public Health & Vaccinology (Rosemary Barnes, Cardiff, UK)
- Clinics & Therapeutics (Hanan Balkhy, Riyadh, SA)
- Diagnostics (Gilbert Greub, Lausanne, CH)
- Antimicrobial Resistance & Susceptibility Testing (Germán Bou, La Coruña, ES)

For more information see www.escmid.org/science.

References

ESGAP, the ESCMID study group on Antibiotic Policies, was formed in 1999 at ECCMID in Berlin. The link between antibiotic use and resistance is clear. Consequently, concerns about inappropriate antibiotic prescribing have never been greater. The reversal of resistance problems is often feasible by changing patterns of antibiotic use. Audits repeatedly show tremendous variations in standards for antibiotic prescription, but the common topic is one of unnecessary use. The group promotes educational and research activities on antimicrobial stewardship, and aims to share knowledge and experiences on its open learning platform (see below). ESGAP provides a common forum for scientists and healthcare professionals involved in antimicrobial stewardship at local, national and international levels. It stimulates co-operation and links between other existing programmes and initiatives concerned with antibiotic resistance.

Postgraduate educational courses on various aspects of antimicrobial stewardship, traditionally organized just before ECCMID, are among the most visible ESGAP educational activities. Attendance of these courses has been growing in recent years, partly because of recognition of the course but also because of the increasing necessity for education in antibiotic stewardship. In addition, ESGAP has organized many workshops in different parts of Europe together with national professional societies, and provided faculty for various international conferences and educational events, including the South-East European Conference on Chemotherapy and Infection, Eurasia Congress of Infectious Diseases and ABS International, which helped bringing knowledge of antibiotic stewardship to various parts of Europe and beyond. ESGAP speakers regularly present at ICAAC. There is an ESGAP symposium included at 15th ASM Microbe conference this year.

Research activities focus on various aspects of antimicrobial stewardship. One of the achievements in the past was the ABC calculator for the measurement of antibiotic use in hospitals. The issue of forgotten antibiotics was addressed in 2011 and again in 2015. There have been a number of projects published: 2012 global survey on antimicrobial stewardship activities with ISC, an analysis of colistin dosing with EPASSG in 2014 and a survey on antibiotic treatment of endocarditis in 2015. In recent years ESGAP has focused on the education of medical students and trainees. A multi-centre study of European medical students’ knowledge, attitudes and practices of antibiotic prescribing and associated resistance was published in 2014, and in 2015 a large study that included more than 10,000 medical students across Europe was completed. Another survey looked at antimicrobial stewardship in the curricula of European medical schools. A more recent survey focused on the educational needs of young doctors in training.

The ESGAP open virtual learning community (OVLC, at http://esgap.escmid.org) provides an excellent platform for communication among all professionals interested in antimicrobial stewardship. The platform provides information on all important achievements in this field, including guidelines, initiatives and interesting papers, and leaves space for discussion. For the last European Antibiotic Awareness Day (EAAD) the OVLC enabled the valuable exchange of specialists’ experiences across several countries.

The ESGAP newsletter regularly brings newsflashes on the most important topics such as educational or research activities; a special issue was published for the 2015 EAAD together with EUCIC.

At the moment ESGAP has 93 members from 31 countries and all continents except Central and South America. The new executive committee of 15 members was formed in 2015 and consists of mostly young, enthusiastic scientists. We are very excited about our new research projects and educational activities for 2016 in which we would like to involve ESGAP members and all other colleagues who feel responsible for the prudent use of antimicrobial drugs. You are welcome to join us!
News from our study groups

This yearbook looks back over the many activities performed by our study groups in the calendar year 2015. In general, the groups have
• contributed to the organization of 25 symposia, 17 educational workshops and 12 meet-the-expert sessions at ECCMID 2015 in Copenhagen
• organized 15 ESCMID Postgraduate Education Courses / Technical Workshops all over the world (see pages 36, 37).

Here is a selection of major achievements of the individual study groups in addition to the courses and ECCMID sessions mentioned above.

EFISG
European Society of Clinical Microbiology and Infectious Diseases

• Close to publishing the ESCMID guidelines for the diagnosis and management of Aspergillus diseases in collaboration with ESGICH, ECMM, ERS
• Collaborated with the ESCMID Biofilm Study Group on the biofilm guideline (completed and published 2015)
• Co-organized the 7th Trends in Medical Mycology (TIMM), 9 – 12 October 2015, Lisbon, Portugal

EFWISG
European Society of Clinical Microbiology and Infectious Diseases

• Runs the European multicentre prospective quarterly point prevalence study of community-acquired diarrhoea (EUCDDI), study coordinator Franz Allerberger, Austria
• Runs the study group research project ‘Discrimination of Salmonella non-typhoid high-risk clones by high-throughput spectroscopic techniques [MALDI-TOF and FTIR-ATR]’, study co-ordinator Luisa M V Peixe, Portugal

EPASG
European Society of Clinical Microbiology and Infectious Diseases

• Collaborates with ESGCIP on a survey of current practice of nebulizing antibiotics in mechanically ventilated patients, corresponding to the evidence-based guideline project (ESGCIP)
• Distributes a study grant of EUR 1,000 annually to foster collaboration across laboratories and help mentor young investigators
• Runs an IMI project in the ND4BB programme: DRIVE-AB (re-investment in R&D and responsible antibiotic use), study coordinator Ursula Theuretzbacher

ESGAI
European Society of Clinical Microbiology and Infectious Diseases

• Published three articles in Anaerobe on Bacteroides (ESGAI acknowledged)
• Runs the study group research project ‘Investigation of antimicrobial susceptibility patterns of Prevotella isolates in European countries’, study coordinator Nurver Ulger Toprak, Turkey. The study is almost finished
• Runs the research project ‘Isolation and analysis of Bacteroides strains from faecal samples’. The study is financed by ESGAI resources
• Runs ENRIA (European network for rapid identification of anaerobes), a joint initiative of seven expert laboratories, supported by ESGAI and ESSEM

ESGAP
European Society of Clinical Microbiology and Infectious Diseases

• See article on previous page

ESGARS
European Society of Clinical Microbiology and Infectious Diseases

• Developed the novel surveillance system for Eastern Europe and Central Asia, CAESAR, in collaboration with WHO Europe and RIVM, which published its first annual report in 2015. The system is compatible with EARS-Net, and focuses on invasive isolates only. ESGARS contributes with microbiological capacity building as well as methodology for surveillance and interpretation of data
• Organized a multi-country workshop on AMR in Copenhagen in February 2015
• Organized national workshops in Montenegro, Uzbekistan, Georgia, Armenia, Albania, Tajikistan and Turkmenistan

ESGB
European Society of Clinical Microbiology and Infectious Diseases

• Published the ESCMID 2014 Guideline for the Diagnosis and Treatment of Biofilm Infections. CMI 2015; 21 (Suppl. 1), coordinated by ESBG, supported by EFISG
• Organized the EuroBiofilm 4 conference, Brno, Czech Republic, 23 – 26 June 2015
• Runs an annual online course on biofilms, autumn 2015
ESGBOR/ESCMID expert Franc Strle, Slovenia, contributes to IDSA's Lyme borreliosis medical guideline project

- Runs study group research project 'Exploring the genomics tool box for tick-borne bacterial pathogens of the Borrelia burgdorferi sensu lato species complex', study coordinator Gabriele Margos, Germany
- Runs EU-wide external quality assessment study on the sensitivity and specificity of different DNA amplification protocols for detection of Borrelia burgdorferi sensu lato, study coordinator Volker Fingerle, Germany
- Co-organized the International Conference on Lyme Borreliosis and other Tick-borne Diseases / ICLB2015, Vienna, Austria, 27 – 30 Sep 2015

Published four articles with ESGCD acknowledgement in diverse journals (Anaerobe, EJCMIID, PLoS One, Annals of Clinical Microbiology and Antimicrobials)

- Runs two revision projects of medical guidelines for Clostridium difficile [diagnosis and infection control]
- Runs CDI diagnosis guidelines project, study coordinator Ed J Kuijper, the Netherlands
- Runs the European multi-centre prospective bi-annual point prevalence study of the incidence of Clostridium difficile infection in patients with nosocomial diarrhoea (EUCLID, Astellas-sponsored point prevalence study coordinated by Mark Wilcox)

ESGCP

- Runs medical guideline project 'Nebulized antibiotics', study coordinator Jordi Rello, Spain, including an electronic survey (ESGCIP/EPASG) on current practice of nebulizing antibiotics in mechanically ventilated patients
- Runs the study group research EU-VAE project 'Prospective evaluation of incidence, risk factors, and outcomes for patients with ventilator-associated events in European intensive care units', study coordinator Leonel Lagunes Luna, Spain

ESGEM

- Co-organized the capacity-building workshop 'Next-gen technology for clinical microbiology and infection control [especially typing of S. aureus and MRSA]', March 2015, Münster, Germany
- Co-organized the capacity-building workshop 'Next-gen technology for clinical microbiology and infection control [especially typing of CRE]', October 2015, Groningen, Netherlands
- Runs ENRIA [European network for rapid identification of anaerobes], a joint initiative of seven expert laboratories, supported by ESGAI and ESGEM
ESGFOR: European Society of Clinical Microbiology and Infectious Diseases

- Published article with ESGFOR acknowledgement on ‘Detection of alpha human papillomaviruses in archival formalin-fixed, paraffin-embedded (FFPE) tissue specimens.’ Kocjan BJ, Hošnjak L, Poljak M. J Clin Virol 2015
- Published press release jointly with ESGVM: ESCMID launches study groups to create networks for forensic and veterinary microbiology
- Prepares the launch of an inter-society task force in postmortem microbiology with the European Society of Pathology

ESGI: European Society of Clinical Microbiology and Infectious Diseases

- Runs three multi-centre studies on prosthetic joint infections (resistant Gram-negatives, streptococci and suppressive antibiotic therapy)

ESGIB: European Society of Clinical Microbiology and Infectious Diseases

- Published three articles with ESGIB acknowledgement in BMC Infectious Diseases, BMC Genomics, Eur J Clin Microbial Infect Dis
- Runs study group research project ‘Epigenetic control of meningeal pathogenicity of Listeria monocytogenes’, study coordinator Marco Rinaldo Oggioni, UK
- Runs guidelines project for diagnosis and treatment of bacterial meningitis, publication ongoing

ESGICH: European Society of Clinical Microbiology and Infectious Diseases

- Published the article ‘Current preventive strategies and management of Epstein-Barr virus-related post-transplant lymphoproliferative disease in solid organ transplantation in Europe. Results of the ESGICH Questionnaire-based Cross-sectional Survey’, CMI 2015; 21: 604. PI: Rafael San Juan [ESGICH in author bylines]
- Co-organized the 5th International Congress on Infections and Organ Transplantation, 9 – 11 April 2015, Varese, Italy. Organizer: Paolo Grossi
- Runs the study group research project ‘INCREMEN-SOT. An International Consortium for the clinical study of bloodstream infections caused by multidrug-resistant Enterobacteriaceae in Solid Organ Transplantation’, study coordinator Jose Maria Aguado, Spain

ESGIE: European Society of Clinical Microbiology and Infectious Diseases

- Published a series of reviews authored by ESGIE members in the CMI thematic section entitled ‘Infections in the elderly’, addressing antibiotic prescribing, polypharmacy, antibiotic stewardship and ethical considerations in the elderly. CMI 2015 Jan;21(1)
- Runs the Study Group Research Grant project ‘The participation of the elderly in randomized controlled trials of antibiotic treatment’, study coordinator Mical Paul, Israel
- Collaborated with ESGAP and ESGNI on a 1D-CM-IC survey on staffing status and needs

ESGITM: European Society of Clinical Microbiology and Infectious Diseases

- Collaborated with UEMS ID to publish Ebola guidance on websites of European countries (published online January 2015)
- Organized the ESGITM sessions to the 7th Eurasia Congress of Infectious Diseases [EACID], 30 September – 3 October 2015, Tbilisi, Georgia
- Runs project to improve MALDI-TOF MS databases by two reference laboratories in Switzerland and Germany in collaboration with two major manufacturers bioMérieux and Bruker
• Published five articles; on *Legionella* detection in *J Infect*, on OXY-2-15 in *J Antimicrob Chemother*, on a novel metallo-lactamase variant in *Enterobacter cloacae* in *Antimicrob Agents Chemother*, on *Mycobacterium abscessus* detection in *PLoS One* and on *Tropheryma whippelii* in *J Clin Microbiol*

• Co-organized the 9th European Meeting on Molecular Diagnostics (EMMD), Huis ter Duin, Noordwijk, Netherlands, 14 – 16 October 2015 (Paul Savelkoul, Marijke Raymaekers) and the 18th Annual Meeting of the European Society for Clinical Virology (ESCV), Edinburgh, UK, 9 – 12 September 2015 (Kate Templeton)

• Runs study group research project ‘Pilot study on the microbiome of the appendix and gut in acute appendicitis’, study coordinator Inge Gyssens, Netherlands


• Organized meeting ‘Progress in Human and Animal Mycoplasma’, Pendik, Turkey, 5 – 7 Jun 2015

• Runs collaborative multi-centre evaluation of quantitative PCR assays to detect *Mycoplasma pneumoniae* involving several members of ESGMI from Belgium, Denmark, France, Germany, Israel, the Netherlands, Sweden, UK and US

• Provides advisory service to ESGAP on antimicrobial resistance

• Collaborates with the ERLTB-Net group of ECDC for recommendations on antibiotic susceptibility testing on mycobacteria and participating in the EUCAST subgroup on mycobacteria

• Runs medical guidelines project ‘Guidelines for non-tuberculous mycobacteria’ jointly with European Respiratory Society and IDSA, study coordinator Emmanuelle Cambau, France

• Collaborates with the ERLTB-Net group of ECDC for recommendations on antibiotic susceptibility testing on mycobacteria and participating in the EUCAST subgroup on mycobacteria

• Provides advisory service to ESGAP on antimicrobial resistance

• Runs medical guidelines project ‘Guidelines for non-tuberculous mycobacteria’ jointly with European Respiratory Society and IDSA, study coordinator Emmanuelle Cambau, France

• Coordinates together with ESGAP the project ‘ESCMID Study Groups’ competencies in antimicrobial prescribing and stewardship’ (ESCAPS) to explore a consensus for antimicrobial prescribing and stewardship competencies with contributions from a number of other study groups

• Collaborates with ESGAP and ESGIE on a ID-CM-IC survey on staffing status and needs

• Participates in the European Network in Infection Control and EUCIC, liaison Barry Cookson, United Kingdom

• Runs two study group research projects in collaboration with ESGBIS (one on *Staphylococcus capitis* and one on intracardiac device infections)

• Organized external quality control (EOC; Olivier Denis and Ariane Deplano, both from Belgium) for *Staphylococcus aureus* identification, typing and resistance with 11 laboratories volunteering

• Runs a project to study CA-MRSA prevalence in skin and soft tissue infections with the aim of setting up a prospective multi-centre study involving patients presenting to emergency departments with SSTIs in several European countries, to identify the role and the respective contribution of MSSA, MRSA and PVL-producing *S. aureus* strains as causative agents of SSTIs
ESGVH
European Society of Clinical Microbiology and Infectious Diseases

- Published four articles with ESGVH acknowledgement; two on therapy in HIV/HCV co-infected patients in *Liver Int* and *J Hepatol*, on acute hepatitis C in *CMI*, on chronic hepatitis B in *CMI*
- Runs and funds the project ‘Low HBV-Replication in Adherent TDF/ETV-treated patients, magnitude and determinants, the LoHRA study, a European surveillance network’, study coordinator Karine Lacombe, France

ESGM
European Society of Clinical Microbiology and Infectious Diseases

- Organized the 1st International Conference on One Health Antimicrobial Resistance (ICOHAR), Copenhagen, September 30 – October 4 2015
- Published press release jointly with ESGFOR: ESCMID launches study groups to create networks for forensic and veterinary microbiology

EVASG
European Society of Clinical Microbiology and Infectious Diseases

- Published four articles with EVASG acknowledgement; on influenza vaccination in Expert Opin Drug Saf, on the pneumococcal conjugate vaccine in *Future Microbio*, on mutual protection in *Hum Vaccin Immunother*, on ECCMID summary in *Hum Vaccin Immunother*
- Organized the 3rd ESCMID Conference on Vaccines – Vaccines for Mutual Protection, 6 – 8 March 2015, Lisbon, Portugal, organizing committee: Ron Dagan, Israel, Susanna Esposito, Italy, and Mario Poljak, Slovenia
- EVASG informed through a press release: ESCMID and ESWI call on EU health services to use hospital flu vaccination uptake rankings. Healthcare professionals should be encouraged to take personal responsibility as unvaccinated workers present an unnecessary risk
ESCMID actively supports the publication of high-quality, evidence-based guidance to support best medical practice in the diagnosis and management of infectious diseases.

A major change compared with recent years is the shift from accepting medical guidelines written by our study groups towards directly commissioning all guidelines with the goal of developing a regularly updated core set that can be used to improve patient care. To ensure a high level of consistency among all guidelines, we have been working intensively on the operating procedures (see www.escmid.org/eop for the current version). ESCMID will require the guideline drafting groups to comply with the set procedures, especially the usage of GRADE and the publication in the Society’s journal *Clinical Microbiology and Infection (CMI)*.

The past year, we also have set up a process for consistent internal reviewing and public consultation for all our guidelines. This process has been successfully implemented for two guidelines: “Diagnosis of Clostridium difficile – update” and “Diagnosis and treatment of bacterial meningitis”. In both cases, a large number of comments have been submitted. The authors were grateful to receive feedback and diligently replied and included suggestions in the final documents. For the sake of transparency, the comments and authors’ replies will be published on the ESCMID website along with the final version of the guidelines.

Individual study groups are free to produce position papers and systematic reviews. Such activity will be taken into account for the study group evaluation, but will not require approval by the ESCMID Executive Committee.

| Guideline                                                      | Owner                                      | Status                                      |
|                                                               |                                           |                                             |
| Chronic pulmonary aspergillosis                               | ERS/ESCMID                                 | Published 2016 *(ERJ)*                     |
| Diagnosis, prophylaxis and treatment of biofilm infections    | ESCMID [ESGB]                             | Published 2015 *(CMI)*                     |
| The diagnosis and management of vertebral osteomyelitis       | IDSA (ESCMID endorsed)                     | Published 2015 *(CID)*                     |
| Infection control measures for MDR Gram-negative bacteria in the healthcare setting | ESCMID                                     | Published 2014 *(CMI)*                     |
| Diagnosis and treatment of emerging fungal diseases           | ESCMID/ECMM [EFISG]                       | Published 2014 *(CMI)*                     |
| Treatment of *Clostridium difficile* – update                 | ESCMID [ESGCD]                            | Published 2014 *(CMI)*                     |
| Diagnosis of *Clostridium difficile* – update                 | ESCMID [ESGCD]                            | Publication planned in 2016 *(CMI)*        |
| Diagnosis and treatment of bacterial meningitis               | ESCMID [ESGIB]                            | Publication planned in 2016 *(CMI)*        |
| Diagnosis and treatment of *Aspergillus* diseases             | ESCMID/ECMM/ERS [EFISG]                   | Publication planned in 2016 *(CMI)*        |
| HAP/VAP                                                       | ERS/ESCMID/ESICM                          | Publication planned in 2016                |
| Clinical practice guidelines on leishmaniasis                 | IDSA/ESCMID/ASTMH                         | Publication planned in 2016                |
| Asymptomatic bacteriuria                                      | IDSA/ESCMID                               | Started 2015                               |
| *Clostridium difficile* infection control – update            | ESCMID [ESGCD]                            | Started 2015                               |
| Intra-abdominal infections                                    | IDSA/ESCMID                               | Started 2015                               |
| IV catheter-related infections                                 | IDSA/ESCMID                               | Started 2015                               |
| Bronchiectasis                                                | ERS/ESCMID                                | Started 2015                               |
| Lyme borreliosis                                              | IDSA/AAN/ACR [ESCMID endorsement]         | Started 2014                               |
| Surviving sepsis campaign – revision 2016                    | ISF/ESCMID                                 | Started 2014                               |
| Nontuberculous mycobacteria                                   | IDSA/ATC/ERS/ESCMID                       | Started 2013                               |
The Central Asian and Eastern European Surveillance of Antimicrobial Resistance (CAESAR) network is a joint initiative of the WHO Regional Office for Europe [WHO/Europe], the Dutch National Institute for Public Health and the Environment (RIVM) and ESCMID. CAESAR was established to build and strengthen antimicrobial resistance (AMR) surveillance systems in those European countries that do not belong to EARS-Net, the European Union’s AMR surveillance network, coordinated by the European Centre for Disease Prevention and Control (ECDC). The objectives of the AMR focal points appointed in each country, territory or area are to promote national coordination and strengthen surveillance of antimicrobial consumption and resistance. In collaboration with ESCMID and RIVM, WHO/Europe provides situation analyses, recommendations and follow-up support.

Currently, the following 20 countries/regions participate in CAESAR: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, the Republic of Moldova, the Russian Federation, Serbia, Switzerland, Tajikistan, The Former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, Uzbekistan and Kosovo [1]. To date, seven countries/areas [Belarus, Serbia, Switzerland, The Former Yugoslav Republic of Macedonia The Russian Federation, Turkey and Kosovo] have submitted surveillance data to the CAESAR database. CAESAR also plans to publish a second annual report, covering 2 years of surveillance data, during World Antibiotic Awareness Week (WAAW/EAAD) in November 2016, and will conduct a fourth External Quality Assessment (EQA) in collaboration with ECDC and NEQAS.

During 2015, WHO/Europe, RIVM and ESCMID organized a number of workshops and meetings focusing on AMR surveillance, antibiotic stewardship and laboratory quality management. This included a CAESAR network meeting as well as national and multi-country workshops on AMR. CAESAR has also developed a training module to expand and train its pool of experts. Last year WHO/Europe provided grants to CAESAR countries to hold national AMR surveillance network meetings, which were held in Serbia, Belarus, The Former Yugoslav Republic of Macedonia, Turkey, Bosnia and Herzegovina, and Montenegro in November and December 2015.

Most CAESAR countries have now had their primary country situation analysis. The most recent were performed by WHO/Europe together with RIVM and ESCMID in Kazakhstan, Ukraine, Turkmenistan, and Azerbaijan. In 2015, National workshops, meetings and additional consultation visits to set up national AMR surveillance networks, susceptibility testing, quality assessment (QA) as well as data collection and analysis were performed in the Republic of Moldova, Montenegro, Georgia, Armenia, Albania, Tajikistan, and Turkmenistan.

In July 2015 a Proof of Principle (PoP) pilot study to promote good sampling habits, diagnostics and antibiotic stewardship started in Tbilisi, Georgia. The first results were presented by the national coordinator of the National Center for Disease Control and Public Health at a training course on antimicrobial resistance surveillance and stewardship in Istanbul, Turkey, in November 2015. The PoP study was designed to address the underutilization of microbiological diagnostics by stimulating the appropriate collection of clinical samples [blood samples] at the hospital level, and routine surveillance of micro-organisms causing bloodstream infections at the local and central laboratory levels.

In 2016/17 CAESAR will continue to support countries in setting up national AMR surveillance networks, implementing EUCAST guidelines for antimicrobial susceptibility testing. CAESAR will promote laboratory quality management systems based on international quality standards and provide training to expand its pool of experts. It will initiate PoP studies in at least two additional countries to improve blood sampling habits and routine diagnostics for patient treatment and local and national surveillance purposes. The network also plans to publish a second annual report, covering 2 years of surveillance data, during World Antibiotic Awareness Week (WAAW/EAAD) in November 2016, and will conduct a fourth External Quality Assessment (EQA) in collaboration with ECDC and NEQAS.

The first annual CAESAR report, published in 2015 listing results for 2013, provides background information on the national AMR surveillance networks as well as the antimicrobial susceptibility testing results on invasive isolates reported from Belarus, Serbia, Switzerland, The Former Yugoslav Republic of Macedonia and Turkey. It is available at http://bit.ly/1JwlWl. It also reports the results of EQAs for antimicrobial susceptibility testing (AST). The vast majority of CAESAR countries participate in the annual CAESAR EQAs, and in September 2015 as many as 250 laboratories from 15 countries completed a species identification EQA panel.

An updated version of the CAESAR manual was published in 2015, describing the objectives, methodology and organization of CAESAR. The steps a country needs to take to participate, the sequence for routine data collection and the protocols and AMR case definitions used. The updated CAESAR manual can be found here: http://bit.ly/1Z49APF.

For more information and details on the CAESAR network’s upcoming activities, join us at the CAESAR network meeting at ECMID on Monday morning, 11 April, from 8:30 – 11:30 in room G104.