

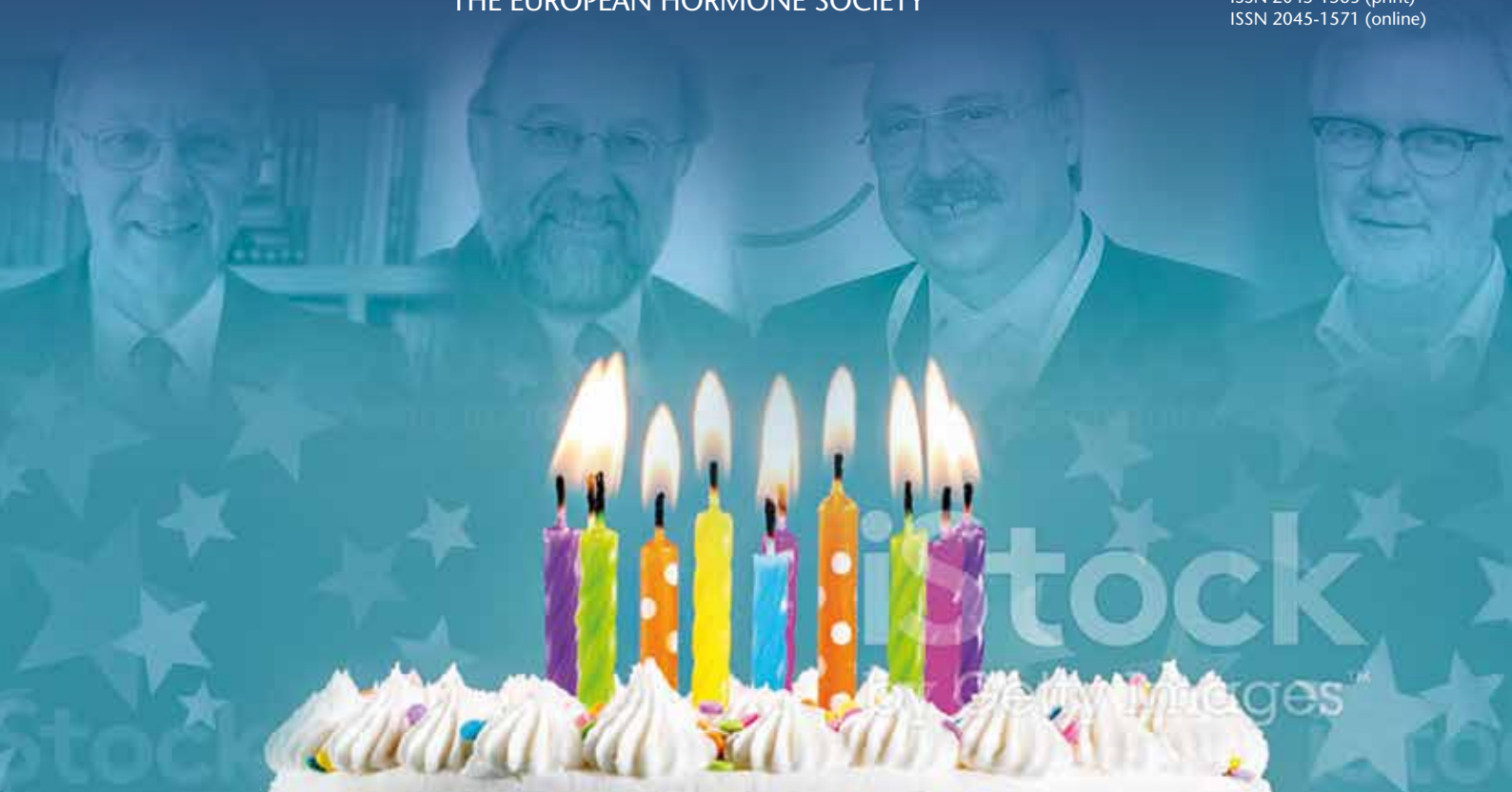


ESE News

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THE NEWSLETTER OF **THE EUROPEAN SOCIETY OF ENDOCRINOLOGY** –
THE EUROPEAN HORMONE SOCIETY

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Celebrating 10 years of ESE!

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This document is available on the ESE website,
www.eese-hormones.org

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Editor: Wouter de Herder, The Netherlands
Email: w.deherder@erasmusmc.nl

Co-Editor: AJ van der Lely, The Netherlands
Email: ese.president@endocrinology.org

Editorial Board: Justo Castaño, Spain
Filip Gabalec, Czech Republic
Ljiljana Marina, Serbia
Hans Romijn, The Netherlands

Sub-Editor: Caroline Brewster

Design: Qube Design Associates

Website: www.eese-hormones.org

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Editorial

Thanks to all of you who took part in ESE's recent research to inform and determine its future strategy. Understanding your views and needs is essential in setting our course for the years ahead.

Ten years after our Society was born, it is exciting to hear many of you describe it as a 'new' and 'dynamic' organisation with an opportunity to have a huge impact on international endocrinology.

With your feedback, ESE will formalise its strategy over the coming months. On page 4, you can see how this is developing, and where we are heading. We want you to understand and be part of your Society's journey, as we work towards launching the new strategy and visual identity in 2017.

A decade is certainly a milestone worth marking and, on pages 6–7, I am joined by my three predecessors as President of ESE, to reflect on an eventful 10 years. Much has been done, but we know there is plenty more to do – there is no time to rest on our laurels!



This year has also seen an exciting summer of sport. On page 10, we travel to Brazil, host of the Olympics and Paralympics, but also home to Cesar Boguszewski and his team of high achieving endocrinologists. Then, on page 11, our first 'EYES Interview' with a young endocrinologist features Andrea Sansone, who is researching herbal doping agents in sport.

We mark the publication of ESE's latest Clinical Practice Guideline on page 8, as Martin Faßnacht describes its importance in managing adrenal incidentaloma. On page 9, Jean-Pierre Bourguignon and Barbara Demeneix share their personal perspective on the EU's attempts to classify endocrine disruptors.

Our discipline continues to thrive as a result of the hard work of endocrinologists worldwide. Please join us in celebrating ESE's 10th anniversary, as we continue to build a strong Society that will support you into the future.

AJ van der Lely
ESE President
Co-Editor of *ESE News*

From the ESE office



As well as sunshine, summer brought excellent news for European endocrinology, when ESE was accepted to join the Alliance

for Biomedical Research in Europe. This non-profit organisation, representing leading European research and medical societies and uniting more than 400,000 researchers and health professionals, is an important collaborative advocacy group, which aims to have an impact on policy and practice at the European level. At ESE, we are committed to having our voice heard at this level, and to placing endocrinologists at the centre of relevant debates. Our participation in collaborative advocacy groups is a major step in advancing this focus and, over the coming years, ESE could also have a formal presence in Brussels. Our membership

of the Alliance will be managed by the Science Committee, and further information can be found on page 5.

Work continues on relaunching ESE with a new visual identity and a clearly defined focus. Any decisions are taken following consultation and detailed research. I thank everyone who has taken the time to complete a questionnaire, talk to one of our researchers on the phone or participate in research activities at ECE 2016 in Munich. All your feedback is essential and valuable. You can see a summary of this research on page 4. The 'new look' ESE will emerge in 2017. We also aim to launch a brand new website next year.

These are exciting times for European endocrinology and ESE! Please contact me if you have any comments or ideas about our current activities, and to let us know how we can support you even better.

Helen Gregson
Chief Executive Officer, ESE
helen.gregson@ese-hormones.org

NEW National Affiliate Membership

Members of ESE's National Affiliated Societies can now benefit from a discount on their ESE membership fees. This takes the form of a new membership category: **ESE National Affiliate Member**. It is available to current as well as new ESE members, and provides all the usual benefits of ESE membership.

The fees for National Affiliate Members are as follows:

- **Ordinary €55** instead of €80
- **Reduced rate (incl. nurses) €20** instead of €35
- **In-training €10** instead of €20

With the support of ECAS (the ESE Council of Affiliated Societies), ESE has built stronger relationships across Europe. The new category, exclusive to members of ESE's National Affiliated Societies, will make it easier for you to access the wider community of European endocrinologists through ESE, alongside the benefits provided by your local society. It will also reduce the costs associated with membership of multiple societies.

For more information, see www.eese-hormones.org/membership/ordinary/benefits.aspx.

Increased exposure for *Endocrine Connections*

ESE's open access journal *Endocrine Connections* is to be indexed in Thomson Reuters' Science Citation Index Expanded. This will increase the exposure of all articles published to date, greatly enhancing the discoverability of authors' work. Authors will be able to track citation data for their articles, which will contribute to their H-indexes.

As the only open access journal in endocrinology that is owned by learned societies, publishing your next paper in *Endocrine Connections*, for less than €1000 (subject to exchange rate), will directly benefit the field by supporting ESE.

Submit your paper now at www.endocrineconnections.com.



Congratulations

Guido Di Dalmazi (Munich, Germany) and Alejandro Ibáñez Costa (London, UK) won the prize draw after completing the ESE Strategy Questionnaire, and will receive free registration for ECE 2017.

Have you discovered *Endocrinology, Diabetes & Metabolism Case Reports*?

Endocrinology, Diabetes & Metabolism Case Reports furthers medical education and clinical practice by publishing and linking together case reports on common and rare conditions in all areas of clinical endocrinology, diabetes and metabolism.

All case reports are freely available online to everyone around the globe. Practitioners can share knowledge and convey medical experiences. This open access resource also has very reasonable publication fees.

You can find out more at www.edmcasereports.com.

ESE collaborates on obesity in Beijing

What's in a brand?

Understanding the aims of ESE

Understanding an organisation's brand is fundamental to fulfilling its potential, setting its strategy, and communicating its purpose. Not to be confused with 'branding', a brand is much more than a logo and visual identity.

At its core, a brand is about the organisation's values – what it is trying to achieve and how it wants people to feel about it. With a well-defined and understood brand, setting strategy and moving forward become logical developments, and the organisation works most efficiently.

Ten years of progress have seen ESE develop and expand. Its brand has matured, so now we need to examine it once again.

Seeking your opinions

Many of you will have been involved when ESE recently commissioned research into how people, particularly members, feel about the Society, and what they want the Society to achieve in the future. This is all part of the exercise to define ESE's brand, to determine its values and to set a direction for future development.

The initial results from the research are now in, and make interesting reading. We would like to share some of them with you here.

The process

Surveys and group research took place at ECE 2016 in Munich, Germany, and also via the web or telephone. Focus groups (each comprising members, non-members or representatives of ECAS, the ESE Council of Affiliated Societies) provided qualitative input, while surveys gave quantitative responses.

The largest survey was via the web, where 920 respondents contributed, and there were 671 complete responses. Of these, 71% were ESE members, and 20% were members of an affiliated society. Most respondents were clinicians (45%), but basic and clinical researchers (9 and 18% respectively) were also represented.

Objectives

The research was designed to:

Understand the issues facing endocrinologists

Explore ESE's role in meeting these challenges

Test ESE's messaging to see how well it resonated

Learn what visual identity might best support ESE's aims

Challenges to address

Respondents' main concerns were that:

- The field needs a voice on a national and international level
- Endocrinologists' views on obesity and diabetes policy get drowned out by more specialist groups
- The US Endocrine Society's opinion sometimes carries more weight in Europe than that of 'home grown' endocrinologists
- The small size of the field can make it hard to attract new recruits
- Links across national borders must continue to be strengthened

Defining ESE's purpose

The results suggested that ESE's aims should be to:

- Promote endocrinology at a European and international level
- Challenge the dominance of the US Endocrine Society in the field
- Draw people together and share knowledge
- Improve patient experiences

How you feel about ESE

- A new and dynamic society
- Potential to have a huge impact internationally
- Brings people together
- Great work on guidelines and education
- Valuable grants
- Excellent professionalism
- Take care to avoid introspection

Steps towards a strategy

The research has resulted in some recommendations for areas that ESE could focus upon.

Diabetes, obesity and endocrine oncology are topics where endocrinologists find themselves competing with other specialties. ESE could help by supporting and developing these areas so that endocrinologists' voices are heard.

Respondents would welcome ESE developing its role beyond Europe and having a more international perspective. In particular, other regions lack the strong endocrine societies found in Europe, and there are clear gaps to be filled. ESE should continue to draw societies together.

ESE needs to agree how much to focus on patients. Respondents felt their work was ultimately dedicated to improving patient experience, and some want ESE to have a role in how patients are cared for. Patient audiences feel that ESE's current brand lacks a connection to the patient experience.

A more transparent and inclusive approach to governance would ensure that ESE is perceived as an organisation that stands up for endocrinology across the whole of Europe and beyond. Increased efforts to democratise and engage people beyond the Society could be achieved by greater communication outside the ESE membership.

Next steps

So where does this information lead us? The next stages will involve work to precisely define the strategy and visual identity, which will be launched in 2017. Watch this space – and thanks to all who have contributed to this important process!

Advocates for endocrinology

Science Committee update

One of the best ways a learned society can help its members is by actively engaging in advocacy, thereby encouraging government organisations to better support members' needs.

With this end in sight, ESE's Science Committee aims to improve opportunities available to endocrine researchers throughout Europe by initiating a programme of advocacy through association with key organisations in Europe.

In addition to its membership of the Initiative for Science in Europe (ISE) and the European Medicines Agency (EMA), ESE has now joined the Alliance

of Biomedical Research in Europe (Biomed Alliance; www.biomedeuropa.org). These organisations all serve to highlight and take action on the issues facing European research and healthcare. By joining forces with other societies through these collaborative advocacy groups, ESE can amplify the voices of its members and effect a greater change in the current policies of European governmental organisations.

The ESE Science Committee will focus on these joint efforts initially, consulting with you, the members, to provide information and gather opinions, and offering our expertise

where it will be of benefit. We will help to distribute important documents to endocrinologists across Europe. As ESE's activity in this area develops, we will begin to address those issues specific to endocrinology and of greatest importance to Society members.

It is essential throughout this process that ESE's advocacy efforts and actions reflect your views and opinions. We will therefore regularly update you about our activities and ensure that interested parties have the chance to provide their input.

Alongside this advocacy initiative, ESE remains committed to supporting endocrine basic research, offering grants to help members working in this area attend ECE and research-specific training programmes, as well as travel funds, prizes and other opportunities. Please see www.ese-hormones.org to find out more.

Márta Korbonits
Science Committee Chair



Alliance for Biomedical Research in Europe

Guidelines for the future

News from your Clinical Committee

Improving standards of care in endocrine disease is the main objective of ESE's Clinical Committee. The development of new ESE guidelines contributes greatly to this. Their production involves experts from within ESE, but also, importantly, interaction with other societies.

An important stage in the process of compiling ESE guidelines is the opportunity given to all national societies within ECAS (the ESE Council of Affiliated Societies) to review and comment on the draft before the guidelines are finalised and presented at the European Congress of Endocrinology. In this way, we hope that ESE guidelines will be adopted in many countries.

ESE can now be proud of the regular publication of guidelines in fields where there was evidently a need. These guidelines aim to cover areas in which no previous international guidelines exist, controversial subjects for which ESE's view is important, or subjects covered by previous guidelines that clearly need to be updated.

The recent clinical practice guideline on management of adrenal incidentaloma, co-ordinated by Martin Faßnacht (a very active member of ESE's Clinical Committee), is an excellent example. It was developed in collaboration with the European Network for the Study of Adrenal Tumors, and was subject to review by representatives of all the

national societies in ECAS. (You can read more about this new guideline on page 8.)

Claus Gravholt is currently co-ordinating a large international collaboration to produce a Turner syndrome guideline. This subject has many aspects, and experts include a wide range of specialists, including both adult endocrinologists and paediatricians.

The Clinical Committee supports the work of Special Interest Groups studying a specific issue for a period of a few years. Pia Burman, the visionary Chair of the first ESE Clinical Committee, promoted the development of a Special Interest Group on aggressive pituitary tumours. ESE members have contributed greatly to the very successful survey on aggressive pituitary tumours, co-ordinated by Gérald Raverot. This will stimulate the development of a very innovative guideline on the subject in 2017.

Jérôme Bertherat
Clinical Committee Chair



Claus Gravholt (left) and Gérald Raverot are working towards future ESE Guidelines

You can read this issue's article from the European Young Endocrine Scientists (EYES) on page 11.

ESE: the first dynamic decade

ESE is 10 years old! To mark the occasion, its four Presidents, past and current, reflect on a productive decade in the Society's development.

Steve Lamberts

I will never forget the decision at a meeting in Brussels where all the Presidents of European national societies voted to create a European Society of Endocrinology.

My central goal as the first President was to actually create the Society. To accomplish this, it was essential that I secured the agreement of the national societies of endocrinology. At that time, many were afraid they might lose the opportunity to organise their own national meetings successfully.



It took frequent discussions and a great deal of persuasion to convince them, but in the end ESE was born.

The organisation of a Society on a European scale was a real challenge. Just as in the European Union, virtually every nationality had a different opinion on how it should be done! With the great support of Sue Thorn (the then Managing Director of Bioscientifica), the Society's organisation and bylaws were formulated and accepted.

Our first Treasurer, the late Jens Christiansen, convinced the so-called 'Acta countries' to donate the journal *Acta Endocrinologica*, with its financial infrastructure, to the new Society.

It was deeply satisfying to see the Society immediately start functioning as a platform for (young) endocrinologists from what, at that time, I called the 'emerging' countries of central and eastern Europe. A rapidly growing number came to our conferences, and active participation via poster and oral presentations quickly increased. Postgraduate meetings at different locations throughout Europe became very popular and successful.

Ten years on, ESE is indeed a successful platform for all European endocrinologists to meet, to discuss innovations, to receive postgraduate education and to present results from research. It has several excellent journals. It has become a firm platform for European endocrinology which can protect and enhance the significance of our specialty.



Eberhard (Ebo) Nieschlag

Our slogan 'ESE – the voice of European endocrinology' expressed our intention to create ESE as a membership-based society alongside the former European Federation of Endocrine Societies (EFES) forum of national societies, to strengthen all aspects of endocrinology in Europe.

Many initiatives sought to communicate our aims, and to reassure national societies that ESE did not intend to compete with them for members. The dilemma of dual national and ESE membership was slowly overcome, reflected by an almost threefold increase in individual members from 2007 to 2011. Membership has grown ever since, and endocrine nurses (who held their first formal session at ECE 2011) also have their own membership category.

Efforts were also made to increase the low proportion of basic scientists, including representation on the Executive Committee and a strong influence in the ECE Programme Organising Committees.

During my presidency, Clinical Practice Guidelines became very popular, produced jointly with the Endocrine Society. Differences in opinion across the Atlantic ultimately led ESE to sponsor its own documents.

We welcomed the Endocrine Societies of Egypt and Tunisia as new members, but the turmoil of the 'Arab spring' of 2011 resulted in fewer societies from the Mediterranean rim joining than might have otherwise. Hopefully more will join in future.

From the beginning, ESE benefited enormously from the experienced professionalism of the Bioscientifica staff in running ESE's affairs and producing our flagship journal, *European Journal of Endocrinology*. An Advisory Board was established to oversee smooth-running of ESE's administration. I believe the greatest achievements of my Presidency include the increasing scientific quality and acceptance of the European Congress of Endocrinology as the premier endocrine event in Europe; the success of *European Journal of Endocrinology*, as reflected by its increasing impact factor; and ESE's very sound financial standing at the end of my tenure. My fondest memories are of working with the other Executive Committee members, who were all great personalities dedicated to the cause of European endocrinology and who generally put it ahead of any personal or national interests.

In 2011, we held a strategic meeting about the future of ESE, and I am pleased that many suggestions from this meeting were later implemented. One I would still like to see taken forward would be an endocrine ambassador as a scientific lobbyist to the EU to provide a strong political voice on behalf of European endocrinology.

Philippe Bouchard

Ten years ago, I was invited to represent the French Endocrine Society as its President at a meeting organised by Steve Lamberts and the late Jens Christiansen, in Brussels, to discuss the creation of a European Society of Endocrinology.

I was enthusiastic, believing it would provide a strong boost to European endocrinology – which at the time was a sort of puzzle, with centres and laboratories spread across the continent, mainly on the west side. It was also a chance to provide training and improve collaboration among Europe's 600 million inhabitants.

It was a glorious day, and the best news concerning endocrinology for a long time.

I was asked to join the Executive Committee, where I initially became Secretary. When I later became President of ESE, my greatest challenge was to increase the number of

members, and my time as President saw a rapid increase in the number of activities the Society organised.

I made two fundamentally important decisions. The first, in collaboration with Leon Heward-Mills (the then Managing Director of Bioscientifica), was to create the role of General Manager of ESE (held by Helen Gregson): a first step towards joining 'the club' of modern international societies. The second decision was to create ECAS (the ESE Council of Affiliated Societies), a sort of 'parliament' allowing the national societies to provide real input into ESE's activities for the good of European endocrinology.

The success of ECE 2014, organised with Andrzej Milewicz in Wrocław, Poland, was particularly memorable. Exceeding all expectations, it was flamboyant, and opened the route to successful meetings in the eastern part of our continent.

ESE has achieved more than I anticipated in its first decade, mainly because of the input of an astounding group of endocrinologists in all areas of its work. However, recent political developments have had a negative effect on European influence worldwide. This will require



the particular attention of ESE's President and Executive Committee. The other main challenge for ESE is obviously the need to keep sponsorship growing, a key full time job for the Officers, and particularly the Treasurer.

If I were to undertake the role again, I would try to further strengthen the weight of European countries, to make ESE, as Ebo Nieschlag put it, the voice of European endocrinology, beyond the political issues.

The best thing about ESE is the spirit it has generated, and the multiplicity of the collaborations it has initiated. Let us continue in this way, and keep the flag flying high!



AJ van der Lely

Although I have only recently taken the reins as President of ESE, as one of the Society's former Treasurers, I already knew it quite well from the inside. My expectations matched what I found: we have an active and young society, rapidly growing and facing multiple challenges.

I thank all of my predecessors as President for working so hard, and creating a Society that, in a relatively short period of time, has become an important player in the field of international endocrinology. That is an immense achievement.

The challenges we now face include what I term 'changing scenery', for instance in the attitude of pharmaceutical industries towards scientific societies. We must make ESE visible to policymakers in Brussels. We also need to create an inviting atmosphere for young endocrinologists, both basic and clinical. Importantly, we must turn ESE into a 'front row' international society.

My vision is that, in 10 years from now, ESE will be a charismatic international society with a large number of members from across the globe. It will be a successful organiser of meetings, courses and congresses, but also have started other activities, including publishing all sorts of materials. It will have created a platform upon which other societies (including those with a

narrower focus) can find perfect logistic support without losing their identity.

To date, my time as President has already seen the development of clear vision statements, and the Society's corporate identity and new structure, as well as the appointment of ESE's first Chief Executive Officer, Helen Gregson. It has been very satisfying to work with the Executive Committee to ensure that the Society is 'future proof'. I also found the great atmosphere and quality of ECE 2016 in Munich heart-warming.

My successor as President will be the first to have a term of only 2 years, which will make it slightly more difficult to implement his/her own imprint. However, thanks to its growth over the last 10 years, ESE has become a stable and strong Society, so a future President will be able to focus on promoting science and education to young and old, basic and clinical scientists.

ESE is young and ambitious, and harbours many enthusiastic endocrinologists from Europe and beyond. For these reasons, I consider it a dream team with a golden future.

New ESE guideline on adrenal incidentalomas aims to reduce follow-up burden

In August, ESE's third Clinical Practice Guideline was published in *European Journal of Endocrinology*,¹ in collaboration with the European Network for the Study of Adrenal Tumours (ENSAT). Its subject was the management of adrenal incidentaloma.

Adrenal masses are one of the most frequent tumours in humans, with a prevalence of around 2–3 %, which increases with age. Most are discovered incidentally, through imaging performed for reasons other than a suspected adrenal tumour. These so-called 'adrenal incidentalomas' may be malignant or benign and, with regard to hormonal overproduction, functionally active or inactive. Most are benign, non-functioning masses.

Despite the high prevalence of the condition, and the expected rise in incidentally discovered tumours, until recently there were no internationally accepted guidelines for their management.



The ESE-ENSAT guideline panel on adrenal incidentaloma: (L–R) Martin Faßnacht, Olaf Dekkers, Stylianos Tsagarakis, Erin Safarjan, Wiebke Arlt, Massimo Terzolo, Henning Dralle, Irina Bancos, John Newell-Price, Anju Sahdev (Antoine Tabarin was absent).

Teamwork

In response, an interdisciplinary guideline panel of 10 international experts (pictured) worked for almost 2 years to determine the best clinical approach. Initiated in late 2013 by ESE's Clinical Committee (then chaired by Pia Burman), the panel had three face-to-face meetings between December 2013 and June 2015, as well as multiple telephone conferences.

The resulting manuscript was shared in December 2015 and reviewed by members of ESE and ENSAT. The guideline was

presented publicly for the first time at ECE 2016 in Munich, Germany, before final revision and publication in *European Journal of Endocrinology*.

Methodology

We followed the so called GRADE (Grading of Recommendations, Assessment, Development and Evaluations) approach, in line with previous guidelines. We first defined the key clinical questions regarding the management of adrenal incidentaloma, before performing a systematic literature research, supported by methodology experts from the Dutch clinical research organisation CBO.

More than 6500 abstracts and 678 papers were reviewed to address all the important questions. Only 136 observational studies were included. No randomised trial was published in the field. Thus, we had to acknowledge that the evidence is still too weak to provide strong recommendations. However, we were driven by the notion that, despite a lack of strong evidence, clinicians need guidance (possibly even more so than in situations where the evidence is clear). Finally, we came up with 40 recommendations.

What's new?

By definition, guidelines cannot derive completely new approaches. However, there are some areas where our recommendations differ from previous expert opinions.

One such is the role of imaging during follow-up. The philosophy of our guideline is that, at the time of the initial detection, clinicians should aim to establish whether an adrenal mass is benign or malignant. In many cases this is possible simply by an unenhanced CT scan. If the non-contrast CT is consistent with a benign adrenal mass (Hounsfield units ≤ 10) that is homogeneous and smaller than 4cm, no further (follow-up) imaging is required. This should avoid



many unnecessary scans, meaning reduced radiation exposure and psychological burden for patients and lower costs for healthcare providers.

Also new is the term 'autonomous cortisol secretion' for adrenal tumours with oversecretion of glucocorticoids (defined by serum cortisol $>138\text{mmol/l}$ ($>5\mu\text{g/dl}$) after an 1mg overnight dexamethasone test) in patients without overt Cushing's syndrome. All panel members agreed the former term 'subclinical Cushing's syndrome' was unsuitable, but finding a new term was not easy. And we are all aware that our definition, based primarily on a 1mg dexamethasone test, has disadvantages.

So we have clearly emphasised that the detection and treatment of co-morbidities potentially related the autonomous cortisol secretion are probably more important than the exact cortisol value. However, we hope and believe that this 'new' definition might simplify the management and lead to better comparable results in future studies.

In addition, the guideline provides recommendations on surgical approach and follow-up, and covers special situations such as bilateral incidentalomas, adrenal masses in patients with extra-adrenal malignancy, and young or elderly patients.

Martin Faßnacht

Department of Medicine, University Hospital Würzburg, Germany

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EDC identification:

is the EC proposal consistent with endocrine science?

The EU laws on pesticides and biocides exclude endocrine disrupting chemicals (EDCs), raising the issue of scientific criteria for EDC identification in the context of the relevant EU legislation.

In June, the European Commission (EC) released a proposal for EDC determination criteria, with a communication document and an impact assessment study.¹ The proposal is based on binary identification (EDC/non-EDC). However, categorisation of EDCs based on the weight of evidence (as for carcinogens) is a scientific necessity.

Causality will reach an intermediate level between 0 and 100%, because conditions with adverse EDC effects are multifactorial and evidence is almost never complete, particularly for human epidemiology. Regulatory screening for EDC properties will probably neither exclude nor establish formally that a chemical is an EDC. Therefore, data from EDC evaluation in peer-reviewed studies by independent scientists must be incorporated. Here, too, different weights of evidence will necessarily appear, supporting different categories for EDC identification.

Without a category of ‘suspected or potential’ EDCs, any compound with partial evidence will be classified as ‘non-EDC’, leading to scientifically unfounded management.

The EC proposal states, ‘Identification of endocrine disruptors is based on all available relevant scientific evidence, primarily performed according to internationally agreed study protocols...’ Though protocols make sense in screening procedures such as the OECD (Organisation for Economic Co-operation and Development) guidelines, science makes progress because protocols are individualised for aims. The criteria proposed by the EC for science data may misunderstand or ignore independent peer-reviewed science.

Three components of the consensual WHO International Programme on Chemical Safety (IPCS) definition² of an EDC are revised in the EC proposal:

1. ‘Known to cause an adverse effect relevant for human health’

‘Known’ excludes suspected EDCs and implies that the level of evidence is either ‘undoubtedly EDC’ or ‘non-EDC’. This high level of certainty contradicts the EC roadmap, which stated ‘known or presumed to cause an adverse effect’, and with the pesticide law stating ‘that may cause an adverse effect’.

2. ‘Has an endocrine mode of action’

The key is no longer the alteration of hormone function as in the WHO IPCS definition, but centres on a mechanism, apparently disregarding the fact that EDCs are detrimental to health because they alter functions, not mechanisms.

3. ‘The adverse effect ... is a consequence of the endocrine mode of action’

Thus, the effect is causally linked to a mechanism and no longer with an altered function. Such changes have important implications. For example, we have known for decades that PCBs (polychlorinated biphenyls) interfere with the role of thyroid hormones³ in brain development, resulting in intellectual impairment.⁴ Since thyroid function is altered, the definition criteria are fulfilled, though the precise mode of action has not been elucidated. Using the revised EC criteria, PCBs would not yet have been banned.

Another concern in the EC proposal is that the endocrine mode of action excludes non-specific secondary consequences. It reads, ‘In applying the weight of evidence determination, ... non-specific secondary consequences shall not be considered.’ It is naïve to apply the specificity of effects of natural hormones to EDCs that are, in essence, non-specific agents. For example, many

pesticides have non-specific effects in the liver that modify hormone metabolism or availability at the receptor level through changes in binding proteins. Hormone action is affected, but such chemicals would not be classed as EDCs under the current proposal.

Finally, the EC proposal involves a subtle shift from a hazard-based to a risk-based approach. It says, ‘An active substance, ... shall only be approved if... it is not identified as having endocrine disrupting properties ..., unless the risk to humans from exposure to that active substance, ... , is negligible.’ This means that derogation is possible for pesticides with negligible risk. How do hazard-versus risk-based management issues apply to EDC regulation of pesticides and biocides in the EU?⁵ Risk is a direct function of exposure and also of the dose–response that determines potency of a chemical. This brings us back to incorporation of potency in the criteria of EDC identification, which is scientifically invalid and misleading.⁵

In summary, incorporation of endocrine science legitimates the use of three categories, according to the weight of evidence:

- endocrine active substances
- suspected endocrine disruptors, and
- endocrine disruptors.

This categorisation permits distinguishing between EDCs and suspected EDCs, crucial for regulatory decision making that should be distinct for these two entities. The EC must recognise that the EDC identification criteria impact regulatory decisions, but also that screening of chemicals for EDC properties has regulatory implications that affect the health of the entire EU population.

Jean-Pierre Bourguignon and Barbara Demeneix

This commentary reflects the opinions of its authors, and is not necessarily that of ESE.

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The Endo Explorer

In pursuit of excellence...

After a summer of sport in the stadia of Brazil, it's time to enter that country's endocrine arena, where 'SEMPR' is leading the field.

'Nothing in this world can take the place of persistence. Talent will not: nothing is more common than unsuccessful men with talent. Genius will not: unrewarded genius is almost a proverb. Education will not: the world is full of educated derelicts. Persistence and determination alone are omnipotent.'

Calvin Coolidge (1872–1933)

Persistence and determination were key factors in establishing a research centre dedicated to endocrinology in our medical school in Curitiba, Brazil.

In 1998, I returned to my hometown after 4 years of postgraduate training at the Research Centre for Endocrinology and Metabolism at Sahlgrenska University Hospital, Gothenburg, Sweden, under the mentorship of Olle Isaksson and Lena Carlsson. I came back with an idea hammering in my head: to transform our academic institution into a national and international reference centre for healthcare, teaching, research and training in endocrine and metabolic disorders.

With full support and encouragement from my mentor and friend Hans Graf, I rolled up my sleeves and started to prepare a project which was dubbed 'SEMPR' (Serviço de Endocrinologia e Metabologia do Paraná), an abbreviation that designates our endocrine division within the university hospital, and also resembles the Portuguese word 'sempre' meaning 'forever'. In other words, it would be an academic project without an expiry date!

The first steps

The project was ambitious, the demands and challenges were many and government funding was limited, almost absent. To overcome the economic obstacles, our strategy was to build business–community partnerships, which has proved a very successful approach in maintaining our activities over the years.

Initial resources were raised, and allowed us to set up our first headquarters in 1999, into which I moved and began work with a group of gifted collaborators trained in different areas of endocrinology. In the subsequent years, many other young and extremely skilled fellows were recruited, and multidisciplinary units especially dedicated to the adrenal, bone metabolism, diabetes, obesity, paediatric and transitional endocrinology, pituitary and thyroid were formed.

Undoubtedly, one of the most satisfying aspects of my professional career has been to inspire so many colleagues to seek the same goals and ideals, working together to turn a dream into a reality.

Pursuit of excellence and innovation

We continued advancing, thanks to the team's hard work, and in 2006 moved to a larger property where the SEMPR Medical Centre was built with funds raised through the efforts of our group. SEMPR is now one of the largest Brazilian academic centres fully dedicated to endocrinology, with a long history

of fruitful collaboration with other institutions.

Our research has consistently been presented and received awards at national and international meetings, and has accounted for more than 300 articles published in peer review journals, as well as numerous dissertations, theses, books and book chapters.¹ We have been involved in several clinical trials and multicentre studies, and in the training of hundreds of residents, fellows and graduate and postgraduate students from all parts of Brazil and other countries.

Last, but not least, our multidisciplinary team is deeply committed to endocrine care, and we are very proud to offer high quality healthcare to thousands of patients using the Brazilian public healthcare system (SUS) each year.²

Retaining our ideology of persistence and dedication, the 'SEMPR family' is proactively building a promising future with new achievements, innovative ideas and excellence in endocrinology.

Cesar Luiz Boguszewski

Professor of Endocrinology, Department of Internal Medicine, Endocrine Division (SEMPR), Federal University of Parana, Curitiba, Brazil

Cesar Boguszewski is also Chair of the International Committee of the Brazilian Society of Endocrinology and Metabolism and Associate Editor for South America of European Journal of Endocrinology.

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The EYES interview:

A young endocrinologist in sports

'Win or lose, do it fairly'

Knute Rockne (1888–1931)

This quote, from one of the greatest coaches in college football history, Norwegian American football player and coach Knute Rockne, inspires us to follow his advice, not only in sports but in everything we undertake.

Working as a young doctor at the Sapienza University of Rome, Andrea Sansone is conducting his research into doping in sports. Along with his mentors – Francesco Romanelli, Luigi di Luigi and Chairman Andrea Lenzi – Andrea is investigating the effects of herbal remedies on androgen production.



Andrea, what kind of research are you performing in sports endocrinology?

It is mostly clinical research. We are investigating the effects of herbal remedies on androgen production. Some of these products can increase endogenous testosterone production in animal models. It is likely that athletes might take these medications in order to have a doping-like effect. Since literature in this field is severely lacking, we are investigating the effects of herbal remedies on healthy males, in order to have some additional insight into human steroidogenesis.

How much are herbal remedies present in everyday use in professional athletes? Is there any way for doctors or biochemists to track them in blood or urine?

I guess no-one really knows how many athletes use herbal remedies. We are still trying to understand how they might be tracked. Furthermore, the most important question remains as to whether any of these substances actually have an effect on performance in sports.

We understand you are interested in 'e-sports' as well – can you explain more?

I have always been an avid video game player, so I have taken interest in e-sports (i.e. video game tournaments) since the first international events. Results of our research on video gamers still have to be published, but we have observed that there are a few differences between video gamers and non-video gamers in terms of sexual dysfunctions (such as erectile dysfunction and premature/

delayed ejaculation). As an andrologist, I am mostly interested in sexual health in professional video game players.

There is much, much more to be studied. e-Sports are obviously different from traditional sports, and yet they have certain things in common, such as dopamine secretion and heart rate. Beta-blockers are considered doping agents in some sports; should we consider applying similar rules to e-sports?

Can you tell us more about your recent talk on sports endocrinology?

Yes, I was invited by the ESHRE (the European Society of Human Reproduction and Embryology) to speak during a pre-congress course on sports and andrology. I gave a talk on the morpho-functional alterations associated with sports practice. While the topic wasn't exactly easy, it allowed me to focus on some pretty unexplored areas of endocrinology in athletes. Pituitary damage resulting from traumatic brain injury is a recognised phenomenon in football, hockey and similar sports, but it is likely that many similar alterations might occur in different kinds of physical activity.

What is your view on doping in sports?

Professional athletes are often put under pressure by their teams, since a non-significant statistical difference might be enough to secure a gold medal instead of a bronze one. On the other hand, amateur athletes often disregard the possible side effects of medications, thinking there is no harm in trying to get better results. While the latter is the result of ignorance, the former is a deliberate action intended to artificially increase performance while posing a significant health risk to the athlete concerned. This means that professional athletes who use doping are both robbing themselves of their health, and robbing the other athletes of honest competition.

The final question! Do you find time to work out?

I wish I could! The nearest gym is just across the road, but I often return home too late in the evening, and I lack the necessary willpower to do so.

Andrea Sansone works in the Department of Experimental Medicine, Section of Medical Pathophysiology, Food Science and Endocrinology at the Sapienza University of Rome, Italy.



10 years of ESE: how it all began

ESE celebrates its 10th anniversary this year. Here we present a short history of European endocrinology organisations, and how they led to the dynamic society we know today.

Historically, a close collaboration existed between the Scandinavian (Danish, Swedish and Norwegian), Finnish, German, Dutch and Swiss Endocrine Societies. This organisation was named the 'Committee of the *Acta Endocrinologica* Countries' (CAEC).

CAEC founded the first European endocrine journal, which was named *Acta Endocrinologica* (Copenhagen), in June 1948. CAEC also organised the *Acta Endocrinologica* Congresses, the first of which (otherwise known as the 3rd Scandinavian Endocrine Meeting) took place in Copenhagen, Denmark, on 22–25 August 1954.

The first European Congress of Endocrinology was held in Copenhagen on 21–25 June 1987. It was here that the European Federation of Endocrine Societies (EFES) was founded. John Fredrik Dymling from Malmö, Sweden, was the first President of EFES. *Acta Endocrinologica* (Copenhagen) also became the official journal of EFES. In 1993, it was renamed *European Journal of Endocrinology*.



January 2006 saw the founding of the European Society of Endocrinology (ESE), and EFES ceased to exist. Steven Lamberts from Rotterdam, The Netherlands, became the first President of ESE. In the same year, the 8th European Congress of Endocrinology was held in Glasgow on 1–5 April. All attendees at that meeting were invited to join the new ESE free of charge, and so the Society acquired its first individual members.

Today, ESE has more than 3500 individual members and almost 60 affiliated societies, as well as associate members and corporate members. In 2013, ESE and the national affiliated societies formed the ESE Council of Affiliated Societies (ECAS), with the aim of raising the profile of European endocrinology.

As members of ESE, we can all join together and look forward to the next decade of fruitful collaborations in endocrinology!

Wouter W de Herder
Editor, *ESE News*

Did you know?

Radioiodine treatment for thyroid disorders

It is 75 years since iodine 131 was first used to treat a patient with Graves' disease. Saul Hertz (1905–1950; pictured) and Earle M Chapman (1903–1990) carried out the procedure at the Massachusetts General Hospital in Boston, MA, USA.

Saul Hertz and Arthur Roberts published their early experiences with their first 29 patients in the *Journal of the American Medical Association* 70 years ago, in May 1946 (131 81–86;



<http://jama.jamanetwork.com/article.aspx?articleid=285748>). Thus began the use of radioactive iodine as the standard treatment for Graves' disease.

Save the Dates!

4th Europit Postgraduate Course

14–16 November 2016

Annecy, France

19th ESE Postgraduate Course on Endocrinology, Diabetes and Metabolism

17–19 November 2016

Wrocław, Poland

9th ESE Clinical Update

13–14 January 2017

Abu Dhabi, UAE

8th Skeletal & 3rd Translational ESE Bone Course

23–24 March 2017

Brescia, Italy

20th ESE Postgraduate Course on Endocrinology, Diabetes and Metabolism

20–22 April 2017

Moscow, Russia



19th European Congress of Endocrinology (ECE 2017)

20–23 May 2017

Lisbon, Portugal

Deadlines:

30 November 2016

ESE Short-Term Fellowship

– application deadline

31 January 2017

19th European Congress of Endocrinology (ECE 2017)

– abstract deadline

8 February 2017

Clinical Endocrinology Trust Award

– nomination deadline

28 February 2017

EGeoffrey Harris and European Journal of Endocrinology Prizes

– nomination deadline

31 March 2017

E19th European Congress of Endocrinology (ECE 2017)

– early bird registration

31 March 2017

ESE Small Meeting Grant

– application deadline

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