

Inaugural Androgen Society Newsletter

*From the Editor
Abdulmaged Traish, PhD*

I wish to take this opportunity to welcome our readers and invite you to become active participants in our newsletter, THE FORUM, where we will provide an of exchange of ideas, opinions, and commentaries on the critical healthcare issue of testosterone (T) deficiency and its treatment.

One of the goals of the Androgen Society is to provide a platform for discussion of the latest developments in our field among physicians, scientists, clinical fellows, residents, nurses, and medical students, with the ultimate goal of providing better care for all patients. We anticipate the FORUM will serve this goal by creating an open forum for discussion of new developments in basic and clinical research in the field and to promote greater interactions among healthcare providers with diverse views on this critical issue. Most importantly, through THE FORUM we plan to keep readers informed on current events and to facilitate and promote exchange of ideas and concerns among all interested healthcare providers on T therapy in men with T deficiency.



The FORUM will post brief summaries of current literature, discussions of recently published studies, invited short reviews of research, and will host opinion pieces from prominent figures in the field. Readers' suggestions and remarks are welcome. We hope to broaden and strengthen this newsletter by our readers input and comments.

It is an honor for me to serve as Editor of THE FORUM, the first platform of ideas for the global community of professionals interested in T deficiency and its treatment.

***From the President's Desk
Abraham Morgentaler, MD***

Welcome to the Androgen Society! For the very first time, we have a unified society where the global community of individuals interested in testosterone deficiency and its treatment can share the latest research and clinical information, regardless of their medical discipline.

The concept of such a multidisciplinary society arose from an international expert consensus conference I chaired in November 2015, where 18 individuals from 12 countries came together to address several of the key issues in the field, leading to unanimous agreement on nine resolutions, subsequently published in the Proceedings of the Mayo Clinic, to great impact. Participants in that conference included the fields of endocrinology, urology, andrology, basic science research, diabetology, and general medicine. The discussion from these various perspectives was fascinating, and the Androgen Society was a logical next step to provide a similar forum on a larger scale.



The Androgen Society is a non-profit organization whose mission is to promote excellence in research, education, and clinical expertise regarding testosterone deficiency and its treatment. To achieve this, we plan an annual meeting and a quarterly newsletter, with research updates and articles by experts. All healthcare professionals are welcome to join and participate in the activities of the Androgen Society.

If you find yourself reading and thinking about testosterone, then The Androgen Society is for you! Stay tuned to this space for the latest news, information, and perspectives from distinguished investigators and clinicians. Become a Founding Member today! To join, sign up today on our website at www.AndrogenSociety.org

1st Annual Meeting- February 27-28, 2018 in Lisbon, Portugal

Our first annual meeting will take place in Lisbon, Portugal on February 27 and the morning of February 28, 2018. Highlights of the program include a debate on whether testosterone use should be restricted to men with classical hypogonadism; a review of the results of the Testosterone Trials; panel discussions regarding cardiovascular risk; when and how to offer T therapy to men with prostate cancer; exciting new research regarding the metabolic effects of T therapy; and an overview of T therapy use in women. The Cutting Edge of Science Lecture will be given by Samuel Denmeade of Johns Hopkins University, who will describe the remarkable

results of bipolar androgen treatment (high-dose testosterone injections followed by periods of androgen deprivation) in men with advanced prostate cancer.

This first meeting will be historic! Many of the most renowned names in the field will be participating as faculty. Our small size and the structure of the program will offer many opportunities to interact with experts, and to address clinical questions you may have. For clinicians, a particularly useful session is “Ask The Professors”, where attendees are encouraged to briefly present their problem cases.

You can register for the meeting on our website at www.AndrogenSociety.org

See you in Lisbon!

LITERATURE REVIEW AND UPDATE

The mere mention of “Testosterone” creates visceral positive or negative responses in different individuals, irrespective of whether these individuals are scientists, physicians, business leaders or laymen. So, it is no surprise that in today’s charged atmosphere of scientific debate about testosterone that we are still debating its benefits and harms. The goals of the Androgen Society are to promote a healthy debate among all healthcare providers and insure that there is a seat at the table for all sides of this debate in order to hear all opinions, irrespective of their underpinning origin or preponderance of evidence. We stand for Science and Truth!

A recent systematic review and network meta-analysis was published by In BMJ (Elliott J, Kelly SE, Millar AC, et al. Testosterone therapy in hypogonadal men: a systematic review and network meta-analysis. *BMJ Open* 2017;7: e015284. doi:10.1136/bmjopen-2016-015284) which assessed the relative effects of testosterone products in hypogonadal men from 87 Randomized Clinical Trials (RCT) and 51 Non-randomized studies (NRS). The study highlighted the following outcomes:

Quality of life: In total, 23 RCTs (21 placebo-controlled, two active-controlled) involving 3090 participants when compared with placebo, treatment with any T significantly improved quality of life (SMD -0.26, 95% CI -0.41 to -0.11; n=2834).

Depression: In twelve RCTs (11 placebo-controlled, 1 active-controlled) involving 852 participants randomized to nine treatments when compared with placebo, treatment with T improved depression (SMD -0.23, 95% CI -0.44 to -0.01; n=786).

Libido: In fourteen RCTs (12 placebo-controlled, 2 active-controlled) involving 3167 patients randomized to 10 treatments when compared with placebo, treatment with T significantly improved libido (SMD 0.33, 95% CI 0.16 to 0.50).

Erectile function: In seventeen RCTs (all placebo-controlled) involving 3165 patients randomized to nine treatments when compared with placebo, treatment with T improved erectile function (SMD 0.25, 95% CI 0.10 to 0.41).

Cardiovascular death: In ten RCTs reported the occurrence of cardiovascular death during the treatment period, while an additional nine trials reported that no cardiovascular deaths had occurred (18 placebo-controlled RCTs). When compared with placebo via pairwise meta-analysis, there was no significant difference in the risk of cardiovascular death between placebo and any TRT (all products grouped together) (OR 2.15, 95% CI 0.72 to 6.45).

Other adverse events: When compared with placebo via meta-analysis, there were no increased odds of myocardial infarction, stroke, prostate cancer, heart disease, erythrocytosis or serious adverse events, with the use of any TRT product.

The authors concluded that when considered as a class (any form of testosterone treatment compared with placebo), T improved quality of life, depression, erectile function and libido; however, when the individual T products were compared head to head, there were few differences between the treatments. Furthermore, no increased risk of major harms; however, this must be viewed in light of the high risk of bias of the included studies, the rare nature of serious harms, and the short treatment duration and follow-up of most studies.