

## POSTER SESSION

## 1. (EPI-)GENETICS IN ANDROLOGY

## P 1.1

**Loss-of-function mutations in *TRIM71* as novel cause of early germ cell depletion in men and mice**

J. EMICH<sup>1</sup>, L. TORRES-FERNÁNDEZ<sup>2</sup>, M. WÖSTE<sup>3</sup>, S. MITSCHKA<sup>2</sup>, Y. PORT<sup>2</sup>, C. FRIEDRICH<sup>1</sup>, S. KLIESCH<sup>4</sup>, H. SCHORLE<sup>5</sup>, W. KOLANUS<sup>2</sup>, F. TÜTTELMANN<sup>1</sup>

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## P 1.2

**Characterisation of the infertility-associated gene M1AP**  
N. ROTTE, M. WYRWOLL, C. FRIEDRICH, F.

TÜTTELMANN

Institute of Reproductive Genetics, Münster, Germany

## P 1.3

**The genetic portrait of male infertility: an *in silico* ethnic evaluation of haplotype distribution among populations**

D. SANTI, G. SPAGGIARI, L. PAGLIAI, M. SIMONI, L. CASARINI

University of Modena and Reggio Emilia, Unit of Endocrinology, Department of Biomedical, Metabolic and Neural Sciences, Modena, Italy

## P 1.4

**49, XXXXY syndrome – an infant presenting with ambiguous genitalia**

P. PATEL<sup>1</sup>, R. NERLI<sup>2</sup>, S. GHAGANE<sup>2</sup>

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## P 1.5

**Ten-eleven-translocation enzyme 1 (TET1) and polycomb repressive complex 2 (PRC2) – roles in spermatogenesis and male fertility**

S. A. SHIPLU<sup>1,2</sup>, H. C. SCHUPPE<sup>1</sup>, P. WESTERN<sup>3</sup>, D. FIETZ<sup>4</sup>, K. STEGER<sup>1,5</sup>, U. SCHAGDARSURENGIN<sup>1,2</sup>

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<sup>5</sup>Justus-Liebig-University Giessen, Molecular Andrology, Giessen, Germany

## P 1.6

**Disorders in meiosis, spermatogenic cells and Sertoli cells in rats with experimentally induced metabolic syndrome**

O. L. KOLOMIETS<sup>1</sup>, A. A. KASHINTSOVA<sup>1</sup>, YU. N. KOROLEV<sup>3</sup>, V. E. SPANGENBERG<sup>1</sup>, E. E. BRAGINA<sup>2</sup>

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Russia; <sup>2</sup>A.N. Belozersky Research Institute of Physico-Chemical Biology MSU, Moscow, Russia; <sup>3</sup>National Medical Research Center for Rehabilitation and Balneology, Moscow, Russia

## P 1.7

**TREGEL – a shiny tool to identify type, composition and location of gene regulatory elements**

S. BERRES<sup>1</sup>, S. LAURENTINO<sup>1</sup>, M. WÖSTE<sup>2</sup>, M. DUGAS<sup>2</sup>, J. GROMOLL<sup>1</sup>

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## P 1.8

**Upregulation of *MTHFR* gene expression by 3 weeks of yoga based lifestyle intervention in infertile men**

D. BORTHAKUR<sup>1</sup>, M. KUMAR<sup>1</sup>, H. BATRA<sup>1</sup>, R. KUMAR<sup>2</sup>, R. DADA<sup>1</sup>

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**P 1.9****CFTR genotypes and spermatology in Cystic Fibrosis patients without CBAVD**

V. CHERNYKH, M. SHTAUT, A. SEDOVA, E. BRAGINA, S. REPINA, E. MARNAT, T. SOROKINA, L. KURILO  
*Research Centre for Medical Genetics, Laboratory of Genetics of Reproduction Disorders, Moscow, Russian Federation*

**P 1.10****HDACi drugs hamper experimental mouse teratoma development**

J. KRASIC<sup>1,2,3</sup>, L. SKARA<sup>1,2,3</sup>, A. KATUSIC BOJANAC<sup>1,3</sup>, F. BULIC-JAKUS<sup>1,3</sup>, D. JEZEK<sup>3,4</sup>, M. ULAMEC<sup>2,3,5</sup>, N. SINCIĆ<sup>1,2,3</sup>

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**P 1.11****A case 46,XY DSD in female patient with pseudotranssexualism**

S. KHAYAT<sup>1</sup>, L. KURILO<sup>1</sup>, T. SOROKINA<sup>1</sup>, N. KIBRIK<sup>2</sup>, V. CHERNYKH<sup>1,3</sup>

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**P 1.12****Whole exome sequencing of Sertoli cell only syndrome patient provides novel insights on genetic background on male infertility**

T. MARIC<sup>1,2</sup>, L. TRGOVEC-GREIF<sup>3</sup>, M. LOGARA<sup>4</sup>, L. ZUNIC<sup>4</sup>, R. BELUZIC<sup>3</sup>, O. VUGREK<sup>3</sup>, M. BARBALIC<sup>4,5</sup>, A. KATUSIC BOJANAC<sup>1,2</sup>

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**P 1.13****Reproductive decline across generations due to paternal MTHFR deficiency and linked to demethylation of young retrotransposons**

G. KARAHAN<sup>1,2</sup>, D. CHAN<sup>2</sup>, K. SHIRANE<sup>3</sup>, S. JANSSEN<sup>3</sup>, M. LORINCZ<sup>3</sup>, J. TRASLER<sup>1,2,4,5</sup>

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Therapeutics, Montreal, Canada; <sup>5</sup>McGill University,

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**P 1.14****Small RNA library preparation for human sperm of young adults**

V. SHTRATNIKOVA<sup>1</sup>, V. NAUMOV<sup>2</sup>, V. BEZUGLOV<sup>3</sup>, M. LOGACHEVA<sup>1,4</sup>, L. SMIGULINA<sup>1,5</sup>, Y. DIKOV<sup>1,5</sup>, T. DENISOVA<sup>1,5</sup>, A. SUVOROV<sup>1,6</sup>, J. R. PILSNER<sup>6</sup>, R. HAUSER<sup>7</sup>, S. A. KRAWETZ<sup>8</sup>, O. SERGEYEV<sup>1,5</sup>

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Public Health, Department of Environmental Health, Boston, United States; <sup>8</sup>Wayne State University School of Medicine, Department of Obstetrics and Gynecology, Center for Molecular Medicine and Genetics, Detroit, United States

## 2. ADVANCED TECHNIQUES IN ANDROLOGY

### P 2.1

#### Ultrasonic sonoelastography of scrotum in the diagnosis of male fertility

O. B. ZHUKOV<sup>1,2</sup>

<sup>1</sup>RUDN University, Moscow, Russian Federation;

<sup>2</sup>Association of Vascular Urologists and Reproductologists, Moscow, Russian Federation

### P 2.2

#### X-ray endovascular treatments of vascular erectile dysfunction

O. B. ZHUKOV<sup>1,2</sup>, V. A. UKOLOV<sup>1,2</sup>

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### P 2.3

#### The effect of salubrinol on ER stress pathway in heat-stressed spermatogonial cells in vitro

S. KARADENIZ SAYGILI<sup>1</sup>, M. K. ÖZBILGIN<sup>2</sup>

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### P 2.4

#### Electrophysiological modeling of Vas deferens smooth muscle cells – role of ion channels in generating electrical activities

C. MAHAPATRA

University of California San Francisco, School of Medicine, San Francisco, United States

### P 2.5

#### Protective effect of astaxanthin on testicular ischemia-reperfusion injury in rats

M. BAŠKOVIĆ<sup>1</sup>, A. KATUŠIĆ BOJANAC<sup>2</sup>, N. SINČIĆ<sup>2</sup>, M. HIMELREICH<sup>2</sup>, D. KRŠNIK<sup>2</sup>, D. JEŽEK<sup>3</sup>

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### P 2.6

#### The Novoglan-01 clinical trial of a conservative treatment for adult phimosis

D. GILLATT, E. CHUNG, H. MAZURE, A. JAMES

Macquarie University, Macquarie University Hospital, Macquarie University, Australia

### P 2.7

#### Machine learning applications in the domain of male infertility – development of a prediction model for Klinefelter Syndrome in azoospermic men

H. KRENZ<sup>1</sup>, A. SANSONE<sup>2,3</sup>, C. KRALLMANN<sup>3</sup>, M.

ZITZMANN<sup>3</sup>, M. DUGAS<sup>1</sup>, S. KLIESCH<sup>3</sup>, F.

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### P 2.8

#### Evaluation of functional and genetic integrity of spermatozoa extracted by migration-sedimentation (MS) method

H. Y. MEITEI<sup>1</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, S. SCHLATT<sup>2</sup>, S. K. ADIGA<sup>1</sup>

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### P 2.9

#### Multispiral computed pharmacocavernosography in the diagnosis of venoocclusive erectile dysfunction

O. APOLIKHIN, S. KRASNYAK

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### P 2.10

#### Satisfaction with the semirigid penile prosthesis among couples from a Semiurban Indian population

P. GUPTA

JN Medical College, KLE Academy of Higher Education and Research (Deemed to be University), Department of Urology, Belagavi, India

**P 2.11**

**Two piece inflatable penile prosthesis surgery: operative steps**

P. GUPTA

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**P 2.12**

**Fluorescence microscopy and FE-SEM as complementary tools to detect terminal fucose residues on human sperm glycocalyx**

L. ROBLES GÓMEZ<sup>1</sup>, P. SÁEZ ESPINOSA<sup>1</sup>, E. LÓPEZ VILORIA<sup>1</sup>, N. HUERTA RETAMAL<sup>1</sup>, A. MANUEL<sup>2</sup>, A. ROMERO<sup>1</sup>, J. AIZPURUA<sup>3</sup>, M. J. GÓMEZ TORRES<sup>1</sup>

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**P 2.13**

**Evaluation of the patient's genomic and metabolomic profile to improve the adherence to drug therapy: a study on PDE5 inhibitors**

M. S. ROCCA<sup>1</sup>, A. VIGNOLI<sup>2</sup>, L. TENORI<sup>3</sup>, M. GHEZZI<sup>1</sup>, M. DE ROCCO PONCE<sup>4</sup>, G. VATSELLAS<sup>5</sup>, D. THANOS<sup>5</sup>, R. PADRINI<sup>1</sup>, C. FORESTA<sup>1</sup>, L. DE TONI<sup>1</sup>

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**3. ASSISTED REPRODUCTION AND FERTILITY PRESERVATION****P 3.1**

**Handling temperature and time interval prior to testicular-tissue organotypic culture in prepubertal mice have a differential impact on cellular homeostasis**

R. K. PANDYA<sup>1</sup>, S. R. SALIAN<sup>1</sup>, S. L. KOULMANE LAXMINARAYANA<sup>2</sup>, H. KRISHNAMURTHY<sup>3</sup>, A. CHEREDATH<sup>1</sup>, P. THOLETI<sup>1</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, S. SCHLATT<sup>4</sup>, S. K. ADIGA<sup>1</sup>

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**P 3.2**

**The influence of different ways of education on the home injection of assisted reproduction patients**

H. PAN, L. LI, G. LIU

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**P 3.3**

**Follow-up management of pregnant women undergoing preimplantation genetic testing under the new coronavirus epidemic**

H. PAN, L. LI, Y. LI

*Sixth Affiliated Hospital of Sun Yat-Sen University, Reproductive Centre, Guangzhou, China*

**P 3.4**

**Understanding the role of selective inhibition of Arachidonate 15-lipoxygenase (ALOX15) during human semen cryopreservation**

S. UPPANGALA, K. RAYALLA, H. Y. MEITEI, S. K. ADIGA Kasturba Medical College, MANIPAL, Manipal Academy of Higher Education, Clinical Embryology, Manipal, India

### P 3.5

#### **Loss of CatSper-channel function leads to male infertility and IVF failure: a case report**

T. POCK<sup>1</sup>, C. KRALLMANN<sup>1</sup>, T. SPERLBAUM<sup>2</sup>, F. TUTTELMANN<sup>3</sup>, H. BEHRE<sup>2</sup>, S. KLIESCH<sup>1</sup>, V. NORDHOFF<sup>1</sup>

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### P 3.9

#### **The optimization of freezing media with saccharides and/or antioxidants to improve the quality of cryopreserved boar spermatozoa**

R. SANCHEZ<sup>1</sup>, F. PEZO<sup>1</sup>, F. ZAMBRANO<sup>1</sup>, P. URIBE<sup>1</sup>, J. RISOPATRON<sup>1</sup>, R. A. BURGOS<sup>2</sup>

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Morphophysiology, Valdivia, Chile

### P 3.6

#### **Developing an *in vitro* model for toxicological study of chemotherapy on isolated mouse germline stem cells**

F. LOPEZ<sup>1</sup>, A. CODINO<sup>2</sup>, D. O'CARROLL<sup>2</sup>, R. T. MITCHELL<sup>1</sup>

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Institute, Edinburgh, United Kingdom; <sup>2</sup>University of Edinburgh, Centre for Regenerative Medicine, Edinburgh, United Kingdom

### P 3.10

#### **Gonocyte transformation into spermatogonial stem cells (SSC) – the key to understand infertility and malignancy of cryptorchidism**

R. LI, J. HUTSON

Murdoch Children's Research Institute, Surgical Research, Parkville, Australia

## 4. ENDOCRINOLOGY

### P 3.7

#### ***Ex vivo* testis explant culture of human intrapubertal testicular tissue**

N. L. ADEN<sup>1</sup>, A. SOAVE<sup>2</sup>, U. KORDES<sup>3</sup>, M. BLEEKE<sup>3,4</sup>, A. SALZBRUNN<sup>1</sup>, K. VON KOPYLOW<sup>1</sup>

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### P 4.1

#### **Novel model of sex steroid deficiency in mice to study the physiological effects of delayed and suppressed puberty**

N. KIM<sup>1</sup>, R. KHALIL<sup>1</sup>, K. DAVID<sup>1</sup>, L. ANTONIO<sup>1</sup>, D.

SCHOLLAERT<sup>1</sup>, L. DEBOEL<sup>1</sup>, E. VAN HERCK<sup>1</sup>, N.

WARDENIER<sup>2</sup>, M. COOLS<sup>2</sup>, B. DECALLONNE<sup>1</sup>, F.

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### P 3.8

#### **Novel organoid approaches to induce male differentiation of human PGCLCs**

E. M. MALL<sup>1,2</sup>, N. ROTTE<sup>3</sup>, R. SANDHOVE-KLAVERKAMP<sup>1</sup>, J. WISTUBA<sup>1</sup>, S. SCHLATT<sup>1</sup>

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### P 4.2

#### **Alphoma – a pituitary tumor causing infertility**

K. JANKOWSKA, P. DUDEK, W. ZGLICZYŃSKI

Centre of Postgraduate Medical Education, Department of Endocrinology, Warsaw, Poland

**P 4.3**

**The role of gonadotropins in testicular and adrenal androgen biosynthesis pathways -insights from males with congenital hypogonadotropic hypogonadism on hCG/rFSH and on testosterone replacement**

J. ROHAYEM<sup>1</sup>, M. ZITZMANN<sup>1</sup>, S. LAURENTINO<sup>2</sup>, S. KLIESCH<sup>1</sup>, E. NIESCHLAG<sup>1</sup>, P. M. HOLTERHUS<sup>3</sup>, A. KULLE<sup>3</sup>

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**P 4.4**

**Relationship of Vitamin D status with testosterone levels – a systematic review and meta-analysis**

A. BARBONETTI, S. D'ANDREA, A. MARTORELLA, F. COCCIA, C. CASTELLINI, M. TOTATO, A. PARISI, F. FRANCAVILLA, S. FRANCAVILLA

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**P 4.5**

**Gender dysphoria and hormonal treatment – ten years' experience of a specialized center in Greece**

KAKOULIDIS, I. ILIAS, C. MILIONIS, A. MICHOU, S. STERGIOTIS, S. TOGIAS, A. PAPPA, E. VENAKI, E. KOUKKOU

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**P 4.6**

**A combined form of hypothyroidism is present in Klinefelter syndrome from pre-pubertal children to adult subjects: a longitudinal retrospective study**

F. CARLOMAGNO, P. MAZZOTTA, F. SESTI, M. TENUTA, M. MINNETTI, C. LECIS, A. AURELI, M. SPAZIANI, C. POZZA, D. GIANFRILLI, A. RADICIONI, A. LENZI, A. M. ISIDORI

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**P 4.7**

**Pituitary response to LHRH stimulation tests in different FSHB -211G/T genotypes**

A. SANSONE<sup>1</sup>, M. SCHUBERT<sup>2</sup>, F. TÜTTELmann<sup>3</sup>, C. KRALLMANN<sup>2</sup>, M. ZITZMANN<sup>2</sup>, S. KLIESCH<sup>2</sup>, J. GROMOLL<sup>2</sup>

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**P 4.8**

**Serum and seminal leptin levels, serum testosterone levels and sperm parameters in obese men**

V. RILCHEVA<sup>1</sup>, K. ANANIEVA-TODOROVA<sup>2</sup>, F. MEHMEDOVA<sup>1</sup>

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**P 4.9**

**Action of progesterone on 2-arachidonoylglycerol (2-AG) levels and enzymes metabolizing 2-AG in human sperm**

T. DEPMEIER<sup>1</sup>, T. STRÜNKER<sup>2</sup>, M. LEHR<sup>1</sup>, J. FABIAN<sup>1</sup>, T. PHILIPPS<sup>1</sup>

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**5. GERM CELL BIOLOGY****P 5.1**

**Improving the HPO terms for non-syndromic male infertility**

M. J. WYRWOLL<sup>1,2</sup>, G. W. VAN DER HEIJDEN<sup>3</sup>, L. RAMOS<sup>3</sup>, S. KLIESCH<sup>2</sup>, F. TÜTTELmann<sup>1</sup>

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## P 5.2

### Do WWC proteins have an impact on germ cell differentiation and male fertility?

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## P 5.3

### Swine spermatozoa trigger neutrophil extracellular traps (nets) leading to adverse effects on sperm function

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## P 5.4

### Pharmacology of the steroid- and prostaglandin-binding site controlling the activity of CatSper channels in human sperm

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## P 5.5

### Exposure to polycyclic aromatic hydrocarbons and nicotine, and sperm DNA strand breaks

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## P 5.6

### Indication of novel alternate pathway of testosterone action in spermatogenic germ cells of male Sprague Dawley rats

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## P 5.7

### Identifying novel activin A targets in mouse gonocytes

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## P 5.8

### The effect of sexual activity on mice spermatozoa mitochondrial functionality

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## P 5.9

### Detection of oxidative stress in native semen samples – a new flow cytometric technique

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## P 5.10

### Optical recording of rapid non-genomic progesterone signaling events in human sperm

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**P 5.11****Emerging roles of Melanoma Antigens in male germline stress-resistance**

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**6. MALE HYPOGONADISM****P 6.1****Novel Indices for the evaluation of Obesity in Erectile Dysfunction patients**

S. JOSE, V. VISHAL, R. AT, F. CARDOZA

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**P 6.2****Stereological properties of seminiferous tubules in infertile men with chromosomal and genetic abnormalities**

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**P 6.3****Prostate volume in men with chronic spinal cord injury – a systematic review and meta-analysis of case-control studies**

M. TOTARO<sup>1</sup>, S. D'ANDREA<sup>1</sup>, C. CASTELLINI<sup>1</sup>, A. PARISI<sup>1</sup>, G. FELZANI<sup>2</sup>, S. FRANCAVILLA<sup>1</sup>, F. FRANCAVILLA<sup>1</sup>, A. BARBONETTI<sup>1</sup>

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**P 6.4****Association of erectile dysfunction and type II diabetes mellitus at a tertiary care centre of south India**

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**P 6.5****Testosterone treatment in male patients with Klinefelter syndrome – a systematic review and meta-analysis**

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**P 6.6****Safety of injected testosterone undecanoate in the elderly male**

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**P 6.7**

**Testosterone deficiency and erectile dysfunction in middle-aged type 2 diabetics**

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**P 6.8**

**Male infertility with empty sella syndrome: a case report**

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**P 6.9**

**Male osteoporosis, a still overlooked issue: an identikit of patients seeking bone health evaluation at a tertiary academic medical centre**

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**P 6.10**

**High Prevalence of Sexual Dysfunction Among Patients with Growth Hormone Deficiency (GHD): results from the Management of Adult GHD (MAGHD) Study**

M. L. MONZANI<sup>1,2</sup>, S. PEDERZOLI<sup>1,2</sup>, L. VOLPI<sup>1</sup>, E. MAGNANI<sup>3</sup>, C. DIAZZI<sup>2</sup>, V. ROCHIRA<sup>1,2</sup>

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**P 6.11**

**Family history for cardio-metabolic diseases: a predictor of major adverse cardiovascular events in men with erectile dysfunction**

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**P 6.12**

**Insight on the intracrinology of menopause: androgen production within human vagina**

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**P 6.13**

**Self-reported Premature Ejaculation and related distress – occurrence and clinical correlates – results from the European Male Ageing Study**

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**P 6.14**

**Hyperhomocysteinemia and velocimetric para-meters in patients with erectile dysfunction undergoing penile echo-color Doppler**

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## 7. MALE REPRODUCTIVE ORGAN FUNCTION AND PHYSIOLOGY

### P 7.1

**Testosterone, level of the lesion and age are independently associated with prostate volume in men with chronic spinal cord injury**

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### P 7.2

**Specific function of the neonatal epididymis is reflected in its contractile structures**

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### P 7.3

**Natriuretic peptides as a future alternative for Tamsulosin in BPH treatment**

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### P 7.4

**Does reduced lipid substrate mean impaired testicular function? Androgen and sperm production in men with heterozygous familial hypobetalipoproteinemia**

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### P 7.5

**Generation of three-dimensional extracellular matrix (ECM)-derived scaffolds to reorganize human testicular cells *in vitro***

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### P 7.6

**Repair of penile fracture – how long can it be delayed?**

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### P 7.7

**Epididymosomes participate in the transfer of a subset of epididymis-specific proteins to sperm**

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## P 7.8

### Altered secretory function of male accessory organs and oxidative stress may be involved in male infertility evoked by scrotal heat stress

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## P 7.9

### TLR4/NFKB signaling pathway regulates epididymal embryonic development

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## P 7.10

### Angiopoietin pathway in Benign Prostatic Hyperplasia after Pulsed Electromagnetic Field Therapy – evaluation of a new serum inflammatory marker

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## P 7.11

### Selection for female high fertility feedbacks on male reproductive performance

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## P 7.12

### Anogenital distance – a marker of severity of hypospadias and in-utero androgen production

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## 8. ONCOLOGICAL ANDROLOGY

## P 8.1

### Male Oncofertility – Awareness, knowledge and barriers among Oncologists in India

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## P 8.2

### MAGEC2 as a biomarker for Testicular Germ Cell Tumors

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**P 8.3****Immunopathology of testicular germ cell tumors: a clinical approach**

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**P 8.4****Evidence of a dramatic alteration of the H4 acetylation pattern in testicular cancer patients prior to any treatment**

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**P 8.5****miRNA in prostate cancer – (pre)analytical challenges**

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**P 8.6****The Persistent Müllerian Duct Syndrome (PMDS) in an adult – case report**

J. K. WOLSKI<sup>1,2</sup>, T. DEMKOW<sup>2</sup>, R. SOSNOWSKI<sup>2</sup>, T. KALINOWSKI<sup>2</sup>, B. ADAMOWICZ<sup>2</sup>, K. SIKORA<sup>3</sup>

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**P 8.7****FXYD5/DYSADHERIN is a new marker of prostate cancer progression and aggressiveness associated to epithelial-to-mesenchymal transition**

M. V. MENCUCCI<sup>1</sup>, R. BELLO<sup>2</sup>, M. ROSSO<sup>1</sup>, C. MOIOLA<sup>1</sup>, M. J. BESSO<sup>1</sup>, M. VAZQUEZ-LEVIN<sup>1</sup>

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**P 8.8****Short anogenital distance is associated with testicular germ cell tumour development**

D. MORENO MENDOZA<sup>1</sup>, E. CASAMONTI<sup>2</sup>, A. RIERA-ESCAMILLA<sup>3</sup>, S. PIETROFORTE<sup>3</sup>, G. CORONA<sup>4</sup>, E. RUIZ CASTAÑE<sup>1</sup>, C. KRAUSZ<sup>1,2</sup>

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**P 8.9****Leydig cell tumor presenting as azoospermia – testis sparing surgery and micro TESE – a single center experience**

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## P 8.10

**Abnormalities in the sperm DNA methylome both pre- and post-treatment in men with Hodgkin's disease and testicular cancer**

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## 9. SEXUAL MEDICINE AND MALE SEXUAL HEALTH

### P 9.1

**First night impotence dilemma in man – a Malaysian Study**

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### P 9.2

**Prevalence of self-reported sexual dysfunctions among male COVID-19 patients in Italy**

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### P 9.3

**The physicians gender influences the results of the diagnostic workup for erectile dysfunction**

G. RASTRELLI<sup>1</sup>, S. CIPRIANI<sup>1</sup>, A. CRAPARO<sup>2</sup>, S. DE VINCENTIS<sup>2</sup>, A. GRANATA<sup>2</sup>, G. SPAGGIARI<sup>2</sup>, M. SIMONI<sup>2</sup>, M. MAGGI<sup>1</sup>, D. SANTI<sup>2</sup>

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## P 9.4

**Shaeer's punch technique for trans-corporal excavation of peyronie's plaques upon penile prosthesis implantation**

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## P 9.6

**Erectile dysfunction as an early marker of cardiovascular disease**

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## P 9.7

**Circumferential acquired macropenis – definition and proposal of a geometrically-based reduction corporoplasty**

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## P 9.8

**The role of family history of cardiovascular disease in andrological patients in the late ontogenesis**

V. ODIN, E. KOCHANOV, V. DIDENKO

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## P 9.9

**Long term penile perception scores and sexual health outcomes in patients treated for exstrophy bladder**

P. GUPTA

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**P 9.10**

**Autophotography underestimates clinical extent of Peyronie's disease for penile angulation assessment**  
D. SCHLAGER<sup>1</sup>, O. CAKIR<sup>2</sup>, F. CHIERIGO<sup>3</sup>, F. GEIGER<sup>1</sup>, D. RALPH<sup>2</sup>, C. LEIBER<sup>1</sup>

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**P 9.11**

**Collagenase clostridium histolyticum for the treatment of Peyronie's disease – a prospective 24 month follow up study**

D. SCHLAGER<sup>1</sup>, O. CAKIR<sup>2</sup>, F. CHIERIGO<sup>3</sup>, F. GEIGER<sup>1</sup>, D. RALPH<sup>2</sup>, U. WETTERAUER<sup>1</sup>, C. LEIBER<sup>1</sup>

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## 10. TESTICULAR CELL BIOLOGY AND STEM CELLS

**P 10.1**

**Adenosine is a pro-inflammatory molecule in human testicular peritubular cells**

A. MISSEL<sup>1</sup>, L. WALENTA<sup>1</sup>, M. TROTTMANN<sup>2</sup>, U. PICKL<sup>2</sup>, F. M. KOHN<sup>3</sup>, A. MAYERHOFER<sup>1</sup>

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**P 10.2**

**Regulation of macrophage responses in bone marrow-derived and cell line macrophages by activin A: implications for testis immunology**

J. BENDER<sup>1,2,3</sup>, S. BHUSHAN<sup>3</sup>, A. MANSELL<sup>1,4</sup>, K. LOVELAND<sup>1,2</sup>, A. MEINHARDT<sup>3</sup>, M. HEDGER<sup>1,2</sup>

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**P 10.3**

**Do G protein-coupled estrogen receptor (GPER) and peroxisome proliferator-activated receptors (PPARs) regulate lipid metabolism and steroidogenesis in Leydig cell tumors?**

B. BILIŃSKA<sup>1</sup>, E. GÓROWSKA-WÓJTOWICZ<sup>1</sup>, A. MIŁOŃ<sup>1</sup>, P. PAWICKI<sup>1</sup>, M. KOTULA-BALAK<sup>2</sup>, A. HEJMEJ<sup>1</sup>, J. K. WOLSKI<sup>3</sup>

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**P 10.4**

**Indolamine deoxygenase-1 (*Ido-1*) expression and the effects of follistatin treatment in murine autoimmune epididymo-orchitis**

R. WIJAYARATHNA<sup>1,2</sup>, H. KHANDE<sup>1</sup>, N. NICOLAS<sup>1,2,3</sup>, S. BINIWALE<sup>1,2</sup>, P. GREGOREVIC<sup>4</sup>, K. LOVELAND<sup>1,2</sup>, A. MEINHARDT<sup>1,2,3</sup>, M. FIJAK<sup>3</sup>, M. HEDGER<sup>1,2</sup>

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**P 10.5**

**Testicular dysgenesis syndrome has a stem cell basis**

A. KAUSHIK, D. BHARTIYA

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## P 10.6

### A journey into the testicular tissue of cryptozoospermic patients using single cell RNA sequencing analysis

S. DI PERSIO<sup>1</sup>, T. TEKATH<sup>2</sup>, L. M. SIEBERT-KUSS<sup>1</sup>, J. F. CREMERS<sup>3</sup>, J. WISTUBA<sup>1</sup>, X. LI<sup>4</sup>, G. MEYER ZU HÖRSTE<sup>4</sup>, H. C. DREXLER<sup>4,5</sup>, M. DUGAS<sup>2</sup>, S. KLIESCH<sup>3</sup>, S. SCHLATT<sup>1</sup>, S. LAURENTINO<sup>1</sup>, N. NEUHAUS<sup>1</sup>

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## P 10.7

### Delta-like and Jagged are regulated by androgens in mouse Sertoli cells *in vitro*

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## P 10.8

### Initiation of testicular differentiation in prepubertal marmoset (*Callithrix jacchus*) testicular tissue using an *in vitro* organ culture system

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## P 10.9

### Presence and distribution of mast cells in the testis and epididymis of ten species

M. HIMELREICH PERIĆ<sup>1</sup>, A. DUDAS<sup>1</sup>, M. HOHSTETER<sup>2</sup>, I. MIHIKOVIC BUHIN<sup>2</sup>, M. KOS<sup>3</sup>, A. KATUSIC BOJANAC<sup>1</sup>, D. JEZEK<sup>4</sup>

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## P 10.10

### Comparative analysis of apoptosis and proliferation in teratocarcinoma and the experimental teratocarcinoma *in vivo* model

L. ŠKARA<sup>1,2</sup>, J. KRASIC<sup>1,2</sup>, A. KATUSIC BOJANAC<sup>1,2</sup>, F. BULIC-JAKUS<sup>1,2</sup>, D. JEZEK<sup>2,3</sup>, N. SINCIĆ<sup>1,2</sup>, M. ULAMEC<sup>2,4,5</sup>

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## P 10.11

### Formation of the Testicular Immunological Barrier Through Immune Modulation by Somatic Cells

H. KABBESH<sup>1,2</sup>, K. LOVELAND<sup>3</sup>, P. STANTON<sup>3</sup>, G. SCHEINER-BOBIS<sup>1</sup>, L. KONRAD<sup>2</sup>

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## P 10.12

### Peritubular myoid cells in men with normal and impaired spermatogenesis: CLEC3B as novel candidate for fibrotic remodeling

L. M. SIEBERT-KUSS<sup>1</sup>, S. DI PERSIO<sup>1</sup>, T. TEKATH<sup>2</sup>, J. F. CREMERS<sup>3</sup>, J. WISTUBA<sup>1</sup>, X. LI<sup>4</sup>, G. MEYER ZU HÖRSTE<sup>4</sup>, M. DUGAS<sup>2</sup>, S. KLIESCH<sup>3</sup>, S. SCHLATT<sup>1</sup>, S. LAURENTINO<sup>1</sup>, N. NEUHAUS<sup>1</sup>

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## 11. GENERAL MALE INFERTILITY

### P 11.1

**ITRAQ-based quantitative differential protein expression analysis revealed essential role of glycolytic pathway in flagellum energy balance in asthenozoospermic males**

B. BASNET BARUAH<sup>1,2</sup>, R. RANA<sup>3</sup>, S. KOLA<sup>3</sup>, P. CHATURVEDI<sup>2</sup>, A. SRINIVASAN<sup>3</sup>

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### P 11.2

**Genetic architecture of severe spermatogenic failure and male infertility - time to advance standard of care**

N. KÖCKERLING<sup>1</sup>, C. FRIEDRICH<sup>1</sup>, M. J. WYRWOLL<sup>1</sup>, J. EMICH<sup>1</sup>, N. ROTTE<sup>1</sup>, R. WABSCHKE<sup>1</sup>, M. VOCKEL<sup>2</sup>, M. WÖSTE<sup>3</sup>, C. RUCKERT<sup>2</sup>, J. SEGGEWISS<sup>2</sup>, S. LEDIG<sup>2</sup>, A. C. TEWES<sup>2</sup>, Y. STRATIS<sup>2</sup>, J. WISTUBA<sup>4</sup>, C. KRALLMANN<sup>4</sup>, S. KLIESCH<sup>4</sup>, A. RÖPKE<sup>2</sup>, F. TÜTTELMANN<sup>1</sup>

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### P 11.3

**Clinical and seminal parameters associated with testis microlithiasis and its severity in males from infertile couples**

S. D'ANDREA, C. CASTELLINI, M. TOTARO, G. CORDESCHI, A. PARISI, F. FRANCAVILLA, S. FRANCAVILLA, A. BARBONETTI

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### P 11.4

**Are bisphenols analogues safer than bisphenol A for human spermatozoa? An *in vitro* study**

C. CASTELLINI, S. D'ANDREA, M. TOTARO, A. PARISI, G. DI EMIDIO, C. TATONE, S. FRANCAVILLA, F. FRANCAVILLA, A. BARBONETTI

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### P 11.5

**Clinical and psychological characteristics of men with primary and secondary couple infertility**

F. LOTTI, F. FRIZZA, A. PISETTA, M. MAGGI

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### P 11.6

**LIN28A and LIN28B expression in testicular fibrosis: a case study**

D. KRSNIK<sup>1</sup>, A. KATUSIC BOJANAC<sup>1</sup>, M. HIMELREICH PERIC<sup>1</sup>, F. BULIC JAKUS<sup>1</sup>, D. JEZEK<sup>2</sup>

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### P 11.7

**The protein phosphatase with EF-hand domain 1, PPEF1, is a Ca2+-dependent calmodulin binding protein present in mature spermatozoa**

C. LAVOIE-OUELLET, A. SAINDON, M. CLARK, J. RUIZ, C. BELLEANNÉE, P. LECLERC

CHU de Québec - Université Laval, Québec, Canada

### P 11.8

**Characterization of human sperm intracellular metabolites to understand their association with functional ability and genetic integrity**

A. CHEREDATH<sup>1</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, H. S. ATREYA<sup>2</sup>, S. K. ADIGA<sup>1</sup>

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### P 11.9

**Results of testicular biopsy evaluation and reproductive hormones analysis in infertile men with Sertoli cell only syndrome**

D. ADAMCZEWSKA, J. SLOWIKOWSKA-HILCZER, K. MARCHLEWSKA, R. WALCZAK-JEDRZEJOWSKA

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**P 11.10**

**Mapping men's reproductive decision-making pathways**

A. WHITE

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**P 11.11**

**Ex vivo 7T magnetic resonance imaging of testicular tissue – preliminary results**

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**P 11.12**

**Annexin V MACS sperm selection method could be effective on sperm parameter and embryo quality in male factor patients with high DNA fragment**

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**P 11.13**

**Sperm Izumo1 immunofluorescence comparison of the unexplained infertile men and the men without fertilization problems**

S. E. ÓZKOCER<sup>1</sup>, C. M. SEYmen<sup>1</sup>, A. ÖCAL<sup>2</sup>, I. KAPLANOGLU<sup>3</sup>, Ç. ELMAS<sup>1</sup>

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**P 11.14**

**First Genome Wide Association Study (GWAS) in men with unexplained infertility – Identification of a genetic region determining Follicle-stimulating hormone action**

M. SCHUBERT<sup>1</sup>, L. PÉREZ LANUZA<sup>2</sup>, M. WÖSTE<sup>3</sup>, M. DUGAS<sup>3</sup>, Y. RASSAM<sup>1</sup>, S. HEILMANN-HEIMBACH<sup>4</sup>, F. TÜTTELMANN<sup>5</sup>, S. KLIESCH<sup>1</sup>, J. GROMOLL<sup>2</sup>

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**12. MALE INFERTILITY AND ENVIRONMENT**

**P 12.1**

***In vitro effects of aqueous extract of unfermented rooibos on human sperm function***

N. TAKALANI<sup>1</sup>, G. ADEFOLAJU<sup>2</sup>, R. HENKEL<sup>3,4</sup>, C. OPUWARI<sup>2</sup>

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**P 12.2**

***Impact of metabolically healthy obesity in patients with andrological problems***

F. LOTTI, G. RASTRELLI, E. MASEROLI, S. CIPRIANI, F. GUARALDI, C. KRAUSZ, Y. REISMAN, A. SFORZA, M. MAGGI, G. CORONA

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**P 12.3****Does maternal smoking cessation before the fetal masculinization window mitigate adverse effects on offspring semen quality?**

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**P 12.4****Sperm quality and features of the antioxidant protection system in men living in different regions of Siberia**

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**P 12.5****Inhibition of autophagy impairs sperm quality and promotes cell death in human spermatozoa exposed to oxidative stress**

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**P 12.6****Impact of Electronic Cigarette Smoke Exposure on Testicular and Spermatozoa Performances in Albino Rats**

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**P 12.7****Determination of Promoter Methylation of MLH1 and MSH2 Genes and Their Effect on Sperm DNA Fragmentation and Sperm Chromatin Condensation in Men with Varicocele**

N. HEKIM<sup>1</sup>, S. GUNES<sup>1</sup>, E. LAHRMANN<sup>2</sup>, R. DA COSTA<sup>2</sup>, J. GROMOLL<sup>2</sup>, S. LAURENTINO<sup>2</sup>

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**P 12.8****Paternal preconception methotrexate exposure and perinatal characteristics of the children – a nation-wide register study in Sweden 2006-2014**

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**P 12.9****Epididymis-on-a-chip approach to elucidate the impact of environmental plastic pollution on male fertility**

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**P 12.10****Widely used pesticides and biocides interfere with Ca (2+)-signaling through effects on the CatSper channel in human sperm cells**

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## P 12.11

### **Associations between semen quality and age, meteorological variables, clinical conditions, and lifestyles**

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## P 12.12

### **Are ZnO-NPs harmless to spermatogenesis? Focusing cytoskeleton and nucleoskeleton dynamics in spermatogonia cells**

A. R. PINHO<sup>1,2</sup>, F. MARTINS<sup>1,3</sup>, M. E. V. COSTA<sup>4,5</sup>, A. M. R. SENOS<sup>4,5</sup>, O. A. B. DA CRUZ E SILVA<sup>1,3</sup>, M. D. L. PEREIRA<sup>1,4</sup>, S. REBELO<sup>1,3</sup>

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## P 12.13

### **Lyophilized acai berry (*Euterpe oleracea Martius*) prevents senescence-related decay in male reproductive outcome**

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## 13. REPRODUCTIVE HEALTH

## P 13.1

### **Inhibin b and fsh – the best male fertility report**

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## P 13.2

### **Differential tissue-specific damage caused by bacterial epididymo-orchitis in the mouse**

B. KLEIN<sup>1,2</sup>, S. BHUSHAN<sup>2</sup>, S. GÜNTHER<sup>3</sup>, R. MIDDEENDORFF<sup>2</sup>, K. L. LOVELAND<sup>4,5</sup>, M. P. HEDGER<sup>4,5</sup>, A. MEINHARDT<sup>2,4</sup>

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## P 13.3

### **Medice, cura te ipsum – case report of a first-person experience with male infertility**

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## P 13.4

### **Prolactin in patients of a specialized andrology clinic**

E. VENAKI, I. ILIAS, A. MICHOU, C. MILIONIS, I. KAKOULIDIS, S. TOGIAS, S. STERGIOTIS, A. PAPPA, S. NIKOPOULOU, E. KOUKKOU

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**P 13.5****The (patho)physiology of CatSper Ca<sup>2+</sup> channels in human sperm**

S. YOUNG<sup>1</sup>, C. SCHIFFER<sup>1</sup>, C. BRENNER<sup>1</sup>, F. TUTTELMANN<sup>2</sup>, A. RÖPKE<sup>2</sup>, A. WAGNER<sup>1</sup>, M. KIERZEK<sup>1</sup>, C. KRALLMANN<sup>3</sup>, S. KLIESCH<sup>3</sup>, T. STRÜNKER<sup>1</sup>

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**P 13.6****The role of activin A and chemokines in the development of inflammatory responses during chronic testicular inflammation in mice**

H. HASAN<sup>1</sup>, W. PENG<sup>1</sup>, S. BHUSHAN<sup>1</sup>, E. WAHLE<sup>1</sup>, C. PLEUGER<sup>1</sup>, K. L. LOVELAND<sup>2,3</sup>, A. MEINHARDT<sup>1,2</sup>, M. HEDGER<sup>2,3</sup>, M. FIJAK<sup>1</sup>

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**P 13.7****Development of a multivariable prediction model for congenital unilateral absence of the vas deferens (CUAVD)**

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**P 13.8****Are tests for sperm antibodies useful in clinical routine to identify men with immunologic cause for infertility?**

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**P 13.9****Impact of genetic risk scores on association between childlessness and the risk of cardiovascular mortality**

A. ELENKOV, O. MELLANDER, P. M. NILSSON, A. GIWERCMAN

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**P 13.10****Does the *FSHB* c.-211G>T polymorphism impact the spermatogenic potential in infertile male patients?**

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**P 13.11****Association of seminal plasma infections with oxidative stress**

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**P 13.12****Effect of bariatric surgery on reproductive hormones and semen quality**

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**14. REPRODUCTIVE SUCCESS****P 14.1****Sperm retrieval and cryopreservation in testicular torsion patients – benefits and limitations**

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## P 14.2

### Does Anti-Müllerian hormone have a place in the management of azoospermia? A single-center study of 134 patients

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## P 14.3

### Centriolar defects, centrin 1 alterations and FISH studies in human spermatozoa of a man of a couple that produces aneuploid embryos in natural and artificial fertilization

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## P 14.4

### The functionality of the sperm cell in the presence of antisperm antibodies

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## P 14.5

### Non-invasive management of ejaculatory dysfunction in patients referred for sperm cryopreservation: a retrospective study

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## P 14.6

### Effect of Vas Ligation on TESE results in Non Obstructive Azoospermic Rats

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## P 14.7

### Oxytocin as a new treatment option for ejaculatory disorders – S19 of the rat epididymis as a testing model

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## P 14.8

### Sperm morphology and motility in mice and men: Investigations of defective male germ cell differentiation

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**P 14.9****Genetics and spermatology in CBAVD patients**

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**P 14.10****Sperm recovery and ICSI outcomes in men with non-obstructive azoospermia: a systematic review and meta-analysis**

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**P 14.11****Factors associated with abnormal epididymo-testicular unit in a cohort of French boys operated for unilateral cryptorchidism**

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**P 14.12****Asymptomatic urogenital infections and their impact on male and female fertility**

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**15. SPERM MORPHOLOGY AND FUNCTION****P 15.1****Sperm motility subpopulation structure in stallion: breed differences**

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**P 15.2****Equine sperm morphology analysis: Alive vs dead stained sperms techniques**

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### P 15.3

#### **Topological distribution of functional-biochemical features of spermatozoa by Raman Microspectroscopy**

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### P 15.4

#### **Development of a Rapid-Mixing-CASA technique to quantify transient ligand-induced motility responses in sperm populations**

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### P 15.5

#### **Assessment of DNA fragmentation in live spermatozoa – a novel and rapid application of flow cytometry for sperm analysis**

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### P 15.6

#### **Effect of incubation and analysis temperature on kinematic and morphometric human semen values**

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### P 15.7

#### **Atlas of human sperm morphoanomalies using Trumorph®**

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### P 15.8

#### **Optimal capture frame rate for kinematic human sperm analysis using CASA-Mot systems**

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### P 15.9

#### **Synthesis of caged prostaglandin E<sub>1</sub> derivatives to study the ligand-control of CatSper Ca<sup>2+</sup> channels**

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### P 15.10

#### **Novel perspective in human spermatozoa RNA content assessment and morphology evaluation with *In vivo* acridine orange staining**

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**P 15.11****Unique features of human sperm circular RNAs (circRNAs)**

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**P 15.12****The Ca<sup>2+</sup> channel CatSper is not activated by cAMP/PKA signaling but directly affected by chemicals used to probe the action of cAMP and PKA**

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**P 15.13****RAC1 controls progressive movement and competitiveness of mammalian spermatozoa**

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**P 15.14****TUMOR NECROSIS FACTOR-alpha RECEPTOR-1(TNFR1) is present in human spermatozoa but is not functional in triggering apoptosis pathways**

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