HT, our objective was to characterize patient preferences about which providers they seek for HT care and how follow-up can be provided.

DESIGN: Prospective cross-sectional survey.

MATERIALS AND METHODS: Between May to October 2019 a survey was administered to participants at midwest tertiary medical center’s outpatient clinics prior to implementation of telemedicine. Adult patients 18 years or older initiating or continuing gender affirming hormone therapy were included. The 38-item survey included questions on demographics, barriers to care, and preference for HT follow-up care. All physicians were reproductive endocrinology and infertility physicians or general obstetrician-gynecologists specialized in gender-affirming care. Interest for telemedicine was measured using a Likert scale (1, strongly not interested to 5, strongly interested). Bivariate analysis was performed to compare demographic characteristics and survey responses across patient interest in telemedicine. Multivariable logistic regression was used to identify patient factors independently associated with interest in telemedicine.

RESULTS: Among 111 patients, 70.3% (n = 78) self-identified as transgender, 5.4% (n = 6) as gender queer, non-binary, or gender-nonconforming, 17.1% (n = 19) as female, and 7.2% (n = 8) as male. Regarding follow-up for HT care, 63.1% (n = 70) preferred an in-person visit with a specialist followed by 21.6% (n = 24) video visit with their specialist. Only 15.3% (n = 17) of patients preferred follow-up with a primary care provider (PCP), 29% (n = 31) reported that they would never feel comfortable transitioning care, and the most common concern patients had in transitioning care to their PCP was the expertise of the provider (64.0%, n = 71). Factors associated with interest in telemedicine included identifying as a transgender man (OR 3.94, 95% CI [1.24-12.53]), minority race/ethnicity (OR 6.71 [1.79-25.17]), no need to travel (OR 3.34, [1.14-9.85]), no concerns about video visits (OR 14.66, [4.34-49.56]), and concern about their PCP offering a broad range of gender services (OR 8.63, [2.41-29.67]). Age, income, education, and insurance providers were not significantly different among patients interested in telemedicine and those who were not interested.

41% of patients (n = 46) had no concerns regarding the use of video visits for follow-up. The most common concern chosen by patients was a preference for in-person communication (50.5%, n = 56).

CONCLUSIONS: Patients presenting for HT follow-up prefer continued care with a specialist as opposed to a PCP. Prior to implementation, a majority of patients were interested in telemedicine and those who were not interested. Patients presenting for HT follow-up prefer continued care with a specialist as opposed to a PCP. Prior to implementation, a majority of patients were interested in telemedicine and those who were not interested.

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SURVEY OF CURRENT PRACTICE AND SATISFACTION OF SREI MEMBERS: AN SREI COMMITTEE REPORT. Laurel Stadtmuhr, MD, PhD, Paula Amato, MD, Seifeldin Sadek, MD, Elizabeth A. McGee, MD, Brooke Rossi, MD, Bradley S. Hurst, MD, Jones Institute, Norfolk, VA; Oregon Health & Science University, Portland, OR; University of Vermont Larner College of Medicine, Burlington, VT; Ohio State University Medical College, Columbus, OH; Carolinas Medical Center Atrium Health, Charlotte, NC.

OBJECTIVE: To identify the current practice and satisfaction of reproductive endocrinologists in the U.S.

DESIGN: Cross-sectional survey.

MATERIALS AND METHODS: Cross-sectional survey including 37 questions assessing practice patterns/metrics, compensation, and physician satisfaction. Survey invitations were emailed 3 times in the 4th quarter of 2019 to 982 full members of Society for Reproductive Endocrinology and infertility (SREI). This survey was exempt from IRB approval as it was voluntary and anonymous. Results were compared to a similar SREI survey sent to SREI members in 2014 published by Barnhart et al. in 2016. Continuous data were expressed as mean ±SD.

RESULTS: 314 individuals responded (32%): 48% women and 51% men, a 10% increase in women compared to 2014. 78% were Caucasian, median age range was 51-60 years, and the median years of practice 18 years.

Survey respondents worked an average of 51 hours per week. 43% work in academia, 40% in private groups, 12% corporate or hospital owned practice, and 5% solo practice, which represents a 6% increase in the proportion of corporate practices from the prior survey; 29% have left academic success to a join a private practice, while only 8% have left private practice for an academic position.

The mean practice size was 7.6 ±5.2, increased from 5.5 in 2014. 66% expect to add more physicians within five years. A mean of 617 ±914 fresh IVF cycles were performed annuallly, compared to 470 previously. Surgery volume varies widely, with the mean number of major and minor cases at 199 ±141, and 21.1 ±47.9 respectively per year.

The mean reported compensation was $493,118.18 ±9381.60 up from $400,512 in 2014 with a median salary of $400,000. 39% are salaried, for 41% compensation is revenue-based and the remainder receive compensation based on a combination of factors. 66% feel that their compensation is fair, and 13% are considering leaving their position due to compensation.

31% were equity partners (down from 44%), and 27% report that their practice offers partnership in a mean of 3.1 years. 35% felt very positive about the current state of the specialty of REI, and 42% felt somewhat positive. 78% had a positive professional morale, decreased from 85% in 2014. 68% report that patient interaction is the most satisfying part of their job, and the least satisfactory is work schedule for 48%. 91% would again choose REI as a career.

CONCLUSIONS: Based on the 2019 SREI membership survey, the morale in our sub-specialty remains high. It is a predominately middle-aged Caucasian specialty, but the number of female physicians has increased. Average compensation has increased compared to 2014, and the number of IVF cycles performed per group has increased. The number of REI’s in academia practice remained stable compared to 2014.

Acknowledgment: The authors would like to thank the SREI Board of Directors and Members for supporting this report.


PROCEDURES AND TECHNIQUES

O-169 1:50 PM Monday, October 19, 2020

SAFETY EVALUATION OF A NOVEL PROGESTERONE VAGINAL RING (PVR) IN LUTEAL PHASE SUPPORT: SARA TRIAL RESULTS. Laurel Stadtmuhr, MD, PhD; Vicki L. Schnell, MD; John K. Park, MD; Cristin C. Slater, MD; Eric D. Foster, PhD; Sarah A. Grover, MBBS; Patrick W. Heiser, PhD; Jones Institute, Norfolk, VA; Center of Reproductive Medicine, Houston, TX; Carolina Conception, Raleigh, NC; Idaho Center for Reproductive Medicine, Boise, ID; Ferrari Pharmaceuticals, Inc, Parsippany, NJ.

OBJECTIVE: To assess the safety and tolerability of the PVR after implementation of manufacturing enhancements via comparison to the similarly designed pivotal phase 3 trial which established the safety and efficacy of once-weekly PVR relative to daily 8% progesterone vaginal gel (Stadtmauer 2013).

DESIGN: Prospective, open-label, single-arm, multi-center trial.

MATERIALS AND METHODS: Women aged 18-34 years old with body mass index ≤38 kg/m² and diagnosed with tubal, idiopathic, male factor, ovulatory dysfunction, or endometriosis-linked infertility underwent ovarian stimulation with highly purified human menotropin (HP-hMG) at a fixed dose of 225 IU/day, followed by adjustments according to individual response in a standardized long agonist protocol. Weekly administration of the PVR started the day after oocyte retrieval (OR) followed by fresh blastocyst transfer according to ASRM guidelines (2017) and continued for up to 10 weeks. The primary endpoint was the cumulative rate of any spontaneous abortion, defined as two positive hCG tests but followed by observation of any empty intrauterine gestational sac or one without a fetal heartbeat or absence of viable fetuses up to 12 weeks after OR.

RESULTS: Across 14 U.S. trial sites, 254 evaluable subjects were treated with PVR. Mean subject age was 30.8 years, BMI 26.5 kg/m², AMH 2.8 ng/mL, and FSH 7.0 mIU/mL. Adverse events (AEs) occurring in any empty intrauterine gestational sac or one without a fetal heartbeat or absence of viable fetuses up to 12 weeks after OR.

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primary objective was met, with a cumulative spontaneous abortion rate of 7.4% with upper bound of the 95% confidence interval (CI: 4.4%, 11.5%) below the predefined threshold of 15.0% set based upon the observed 10.0% rate (CI 7.6%, 12.8%) in the pivotal trial (Stadmayer 2015). Clinical pregnancy rates were 43.2% at 10 weeks post OR.

CONCLUSIONS: This trial established a safety bridge between PVR produced via enhanced manufacturing processes and the legacy PVR based upon a rate of spontaneous abortion comparable to that observed in the pivotal phase 3 trial. Weekly administration of the PVR was well-tolerated with good pregnancy outcomes associated with its use in conjunction with hMG stimulation. Based upon demonstrated safety and efficacy coupled with more convenient dosing than existing therapeutics, PVR offers an important option for luteal phase supplementation.


SUPPORT: Ferring Pharmaceuticals, Inc. Parsippany, NJ

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SECOND GENERATION ARTIFICIAL INTELLIGENCE TECHNOLOGY FOR PREIMPLANTATION GENETIC TESTING (PGT) IMPROVES PREGNANCY OUTCOMES IN SINGLE THAWED EUPLOID EMBRYO TRANSFER Cycles (STEET).

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OBJECTIVE: To evaluate whether the use of artificial intelligence technology in PGT (PGTai) improves STEET pregnancy outcomes.

DESIGN: Retrospective cohort study in single university-based fertility center.

MATERIALS AND METHODS: Three next generation sequencing (NGS) platforms were compared in analyzing trophoderm biopsy: standard NGS, NGS with first generation artificial intelligence (PGTai 1.0SM Technology Platform) and NGS with second generation artificial intelligence (PGTai 2.0SM Technology Platform). PGTai 2.0 utilizes proprietary low-pass SNP calling mechanisms to confirm or reject non-diploid copy number regions of interest. Outcomes included rates of implantation, clinical pregnancy, biochemical pregnancy, spontaneous abortion and ongoing pregnancy and/or live birth (OP/LBR). OP/LBR was defined as pregnancies greater than 20 weeks’ gestation of the total number of STEETs. Significant differences were calculated using chi-squared test.

RESULTS: The OP/LBR was significantly higher in the PGTai 2.0 group compared to standard NGS (128/182 (70.3%) vs. 328/529 (62.0%)). PGTai 2.0 vs. NGS showed increased implantation rates (151/182 (82.9%)) vs. 415/529 (78.4%)) and clinical pregnancy rates (141/182 (77.4%) vs. 379/529 (71.6%)), but the differences did not reach significance. PGTai 2.0 vs. NGS decreased biochemical pregnancy rates (7/151 (4.63%)) vs. 36/416 (8.6%) and spontaneous abortion rates (16/141 (11.3%)) vs. 47/329 (12.4%), but these differences did not reach significance. Outcomes in the PGTai 1.0 group were similar to standard NGS.

CONCLUSIONS: The goal of PGT is to increase live birth rates per retrieval and PGT using second-generation artificial intelligence technology with NGS significantly improves pregnancy outcomes over standard NGS and PGTai 1.0. A power analysis will determine if this next generation of PGTai provides improved diagnostic precision by decreasing the percentage of false positive results, which may narrow the number of embryos diagnosed as mosaic.


RESULTS: There were 14,972 embryo transfer cycles analyzed; 11,482 cycles (76.7%) utilized embryos derived from fresh and 3,490 cycles (23.3%) utilized embryos derived from frozen donor oocytes. The mean ages of oocyte donors and intended parent recipients were 26.3 years (±SD 3.6) and 41.4 years (±SD 5.4) respectively. On initial comparison of embryos derived from fresh and frozen donor oocytes, the live birth rate was 41% and 42% respectively. However, once the data was adjusted for the above factors, a significant decrease in live birth was observed in embryos derived from frozen donor oocytes (aRR 0.85, 95% CI 0.80-0.89). A significant increase in biochemical pregnancy loss was noted with embryos derived from frozen donor oocytes (5.6 [fresh] vs 8.6% [frozen], aRR 1.29, 95% CI 1.08-1.53). There was no difference in the proportion of clinical miscarriage between the two groups (12.6 vs 17.4%, aRR 1.06, 95%CI 0.95-1.19). Additionally, there was no difference in low birth weight (32.9 [fresh] vs 29.5% [frozen], aRR 0.98, 95%CI 0.89-1.07) or large for gestational age infants (4.6 vs 6.2%, aRR 1.27, 95%CI 0.96-1.69) between the two groups. This remained true when singletones were analyzed separately for both low birth weight (11.8 vs 12.6%, aRR 1.17, 95%CI 0.93-1.46) and large for gestational age (7.8 vs 9.4%, aRR 1.25, 95%CI 0.94-1.65).

CONCLUSIONS: The use of frozen donor oocytes has become an increasingly popular option in recent years for patients electing to use donor egg. This study, reassuringly, does not suggest a difference in birthweight between fresh and frozen donor oocytes. However, these results do indicate an increased risk for biochemical pregnancy loss and a decrease in live birth rate with frozen donor oocytes. This finding deserves further research in order to optimize the use of frozen donor oocytes in clinical practice.

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FIRST REGISTERED PILOT TRIAL TO VALIDATE THE SAFETY AND EFFECTIVENESS OF MATERNAL SPINDLE TRANSFER TO OVERCOME INFERTILITY ASSOCIATED WITH POOR OOCYTE QUALITY.

Nuno Costa-Borges, PhD, Eros Nikitos, MSc, Katharina Spath, PhD, Klaus Rink, PhD, Konstantinos Kostaras, MD, PhD, Ioannis Zervomanolakis, MD, George Kontopoulos, MD, Panagiotis Polyzos, MD, Stylianos Grigorakis, MD, Thomas Prokopakis, MD, Yannis Vasilopoulos, MD, Nikos Vlahos, MD, Dominique de Ziegler, MD, Dagan Wells, Ph.D., Panagiotis Poutsas, MD, PhD, Gloria Calderón, PhD Embryotools, Barcelona, Spain; Institute of Life, Athens, Greece; Juno Genetics, Oxford, United Kingdom; University of Oxford, Oxford, United Kingdom.

OBJECTIVE: Poor quality oocytes frequently fail to fertilise or produce embryos that arrest during their first days of culture in vitro. Oocyte cytoplasmic dysfunctions (including, but not limited to mitochondria) have

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