

ART reporting Dissecting the New SART Reporting System

Amy Sparks, PhD, HCLD University of Iowa

Treatments have evolved



Ovarian Stimulation



Oocyte Retrieval



Embryo Transfer



Pregnancy



Supernumerary Embryos Cryopreserved



Delivery



Penalties for freeze all cycles:

Ovarian Stimulation





No fresh embryo transfer due to:

- -- OHSS
- -- high P4
- -- genetic testing

OLD SART Report

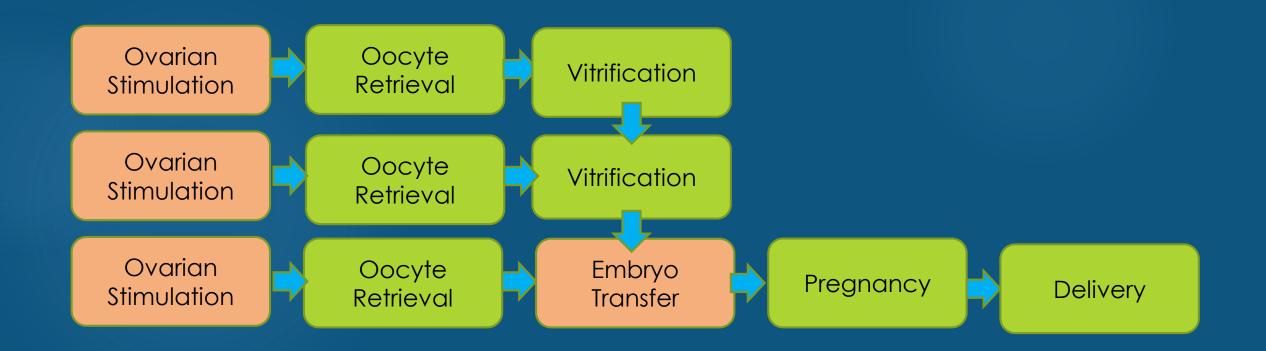
Fresh cycle = No Pregnancy

CDC ART Report

Fresh cycle is excluded from the report

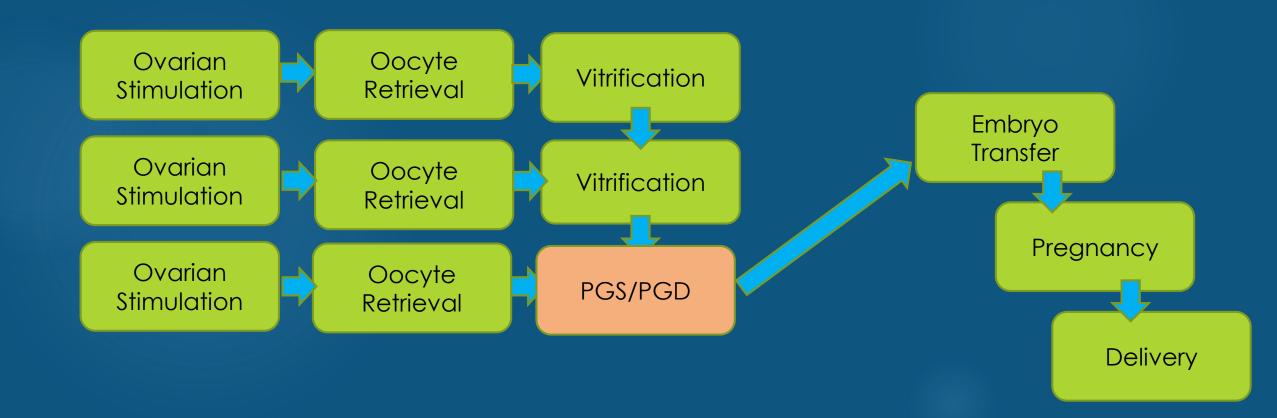


Embryo accumulation for low response





Embryo accumulation for genetic testing

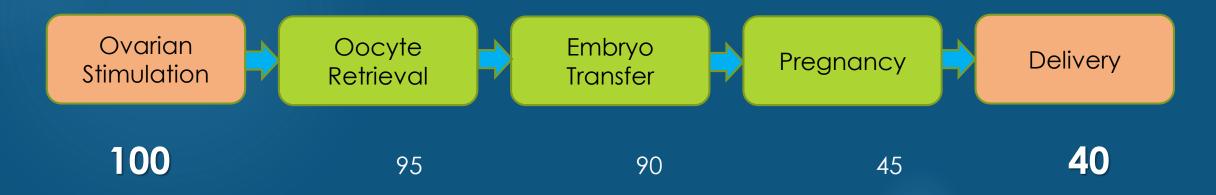




What clinics want to report:



What patients want to know:





Fertility Clinic Success Rate and Certification Act

The FCSRCA mandates that all ART clinics report pregnancy success rates data to the CDC in a standardized manner



SART Clinic Summary Report

- version 2.0

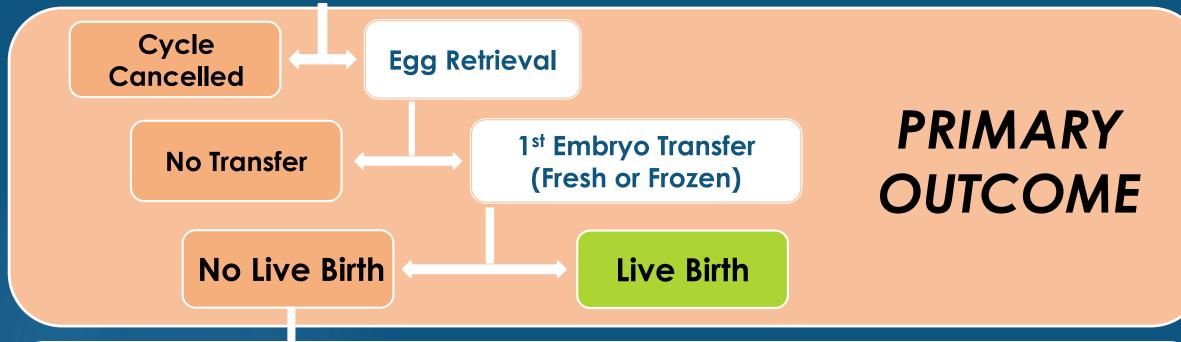
The NEW SART CSR



- Comprehensive view of outcomes from cycles initiated for egg retrieval during a reporting year.
- Emphasis place on singleton live birth rate per cycle start
- No penalty for delayed transfer (freeze all)
- ► Each stimulation counts
- ▶ Total chance of delivery per cycle
- ▶ Total chance of delivery per patient







Additional Frozen Embryo Transfer(s)

No Live Birth

Live Birth

SUBSEQUENT OUTCOME

Cycle Start for Egg Retrieval



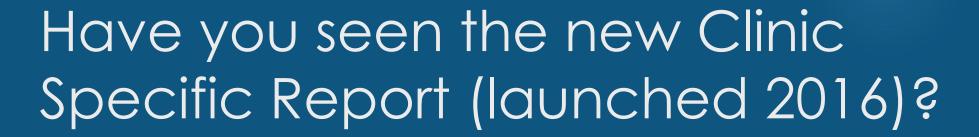
No Live Birth

Live Birth

CUMULATIVE OUTCOME

Maximum of 1 Live Birth per cycle start for egg retrieval.

The cumulative live birth rate will **not** exceed 100%





- A. Yes and I have a good understanding of how treatment outcomes are presented.
- B. Yes but I have no idea how to interpret the report.
- c. No, I had no idea that there was a new Clinic Specific Report.





- A. I use this to compare our center's outcomes to the national average.
- B. I use the Clinic Specific Reports when counseling patients who are seeking care outside of my region.
- c. I use the Clinic Specific Report for patient counseling in my clinic.
- D. I like to see how my center's outcomes compare to my competitors.





sart | Clinic Summary Repor





200 Hawkins Drive, Dept. of Obstetrics and # PFP/40012 Iowa City, IA 52242

(319) 356-8483



Website: http://www.uihealthcare.org/Infertilitycare/

C Request information from this clinic

DONOR EGGS

provide information on patient characteristics per

dable that patients would like to use SART clinic

ts both as a "report card" to judge quality of care

tor of chance of success for each individual tly, the SART clinic summary reports cannot be

NT SEVERITY INDEX

ontext for either purpose.

FILTER

Please note

Accurate and complete reporting of ART success rates is complicated. Clinics may have differences in patient selection, treatment approaches, and cycle reporting practices which may inflate or lower pregnancy rates relative to another clinic. This report is best understood in consult with your physician.

Use of the data in the report for comparing clinics, ranking clinics, making insurance coverage decisions, discouraging patients from seeking care at a given clinic, or for any other commercial purposes is strictly prohibited. By accessing this report, you agree not to use the data in the report for any of the prohibited purposes, and you further agree to abide by the SART Website Terms and Conditions of Use.

I agree to the limitations on use of the data in this report and agree to abide by the SART Website Terms and Conditions of Use.

OK

nore

Embryo Banking Cycles Converted from Fertility Preservation: 0

Oocyte Banking Cycles Converted from Fertility Preservation: 0

- ✓ Donor Embryo
- Gestational Carriers
- Cryopreservation
- ✓ Egg Cryopreservation
- ✓ Female Couple
- Male Couple
- Single Men
- ✓ Single Woman
- ✓ PGD/PGS
- ✓ Mental Health Services
- Service to Veterans

Show less

Provide feedback on SART's new Clinic Summary Report







UNDERSTAND THIS REPORT

PATIENT'S OWN EGGS

DONOR EGGS



All SART Member Clinics

Provide feedback on SART's new Clinic Summary Report



Preliminary CSR for 2014

2637 cycles reported as Delayed Outcome

Total Cycles: 188023

Embryo Banking for Fertility Preservation: 4992 Oocyte Banking for Fertility Preservation: 5709

. ■ UNDERSTAND THIS REPORT

This report is completely re-designed from the past. We did this to provide patients with outcomes that reflect changes in the way infertility is treated through IVF. In recent years, there has been increased emphasis on embryo cryopreservation, genetic testing, and single embryo transfer that was not adequately captured by the old reporting system. This report captures the treatment burden to the patient (the number of cycles) as well as the best outcome (delivery of a healthy child) by tracking outcomes over time for an individual, accounting for both fresh and frozen embryo transfers. We hope this will help you better understand the expected outcomes from Assisted Reproductive Technologies (ART). If you want to get a more personalized prognosis for your chances, please visit the SART patient predictor.



CLINIC SERVICES & PROFILE



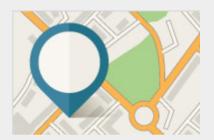


Atlanta Center for Reproductive Medicine



5909 Peachtree Dunwoody Rd, #720 Atlanta, GA 30328

2 770 928-2276



Website: http://www.acrm.com

Request information from this clinic



Practice Director: Lisa A Hasty, M.D.

Medical Director: James P Toner, MD, PhD

Laboratory Director: Chad A Johnson, PhD, HCLD

- SART Member
- Verified Lab Accreditation

Services:

- ✓ Donor Egg
- × Donor Embryo
- **Gestational Carriers**
- Cryopreservation
- Egg Cryopreservation
- ✓ Female Couple
- ✓ Male Couple
- ✓ Single Men
- Single Woman
- ✓ PGD/PGS
- ✓ Mental Health Services



Show less

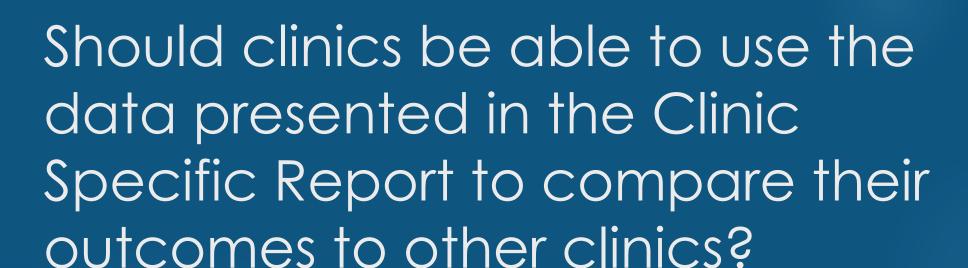


Why we don't provide information on patient characteristics per clinic:

It is understandable that patients would like to use SART clinic outcome reports both as a "report card" to judge quality of care and as a predictor of chance of success for each individual patient. Currently, the SART clinic summary reports cannot be used without context for either purpose.



Read more



- A. Yes
- B. No







UNDERSTAND THIS REPORT

PATIENT'S OWN EGGS

DONOR EGGS



Cumulative Outcome Per Intended Egg Retrieval

Primary Outcome Per Intended Retrieval

Subsequent Outcome (Frozen Cycles)

Live Birth Per Patient

PATIENT'S OWN EGGS

PRELIMINARY CUMULATIVE OUTCOME PER INTENDED EGG RETRIEVAL



			Age of woman		
	< 35	35 - 37	38 - 40	41 - 42	> 42
Number of cycle starts	40580	20965	20016	10691	8357
Singletons	36.6 %	29.9 %	20.0 %	10.7 %	3.4 %
Twins	11.8 %	8.1 %	4.1 %	1.5 %	0.3 %
Triplets or more	0.4 %	0.3 %	0.2 %	0.1 %	0.0 %
Live Births	48.7 %	38.3 %	24.3 %	12.3 %	3.7 %
(Confidence Range)	(48.2 - 49.2)	(37.7 - 39.0)	(23.7 - 24.9)	(11.7 - 12.9)	(3.3 - 4.1)

UNDERSTAND THIS REPORT

PATIENT'S OWN EGGS

DONOR EGGS

FILTER

Cumulative Outcome Per Intended Egg Retrieval

Primary Outcome Per Intended Retrieval

Subsequent Outcome (Frozen Cycles)

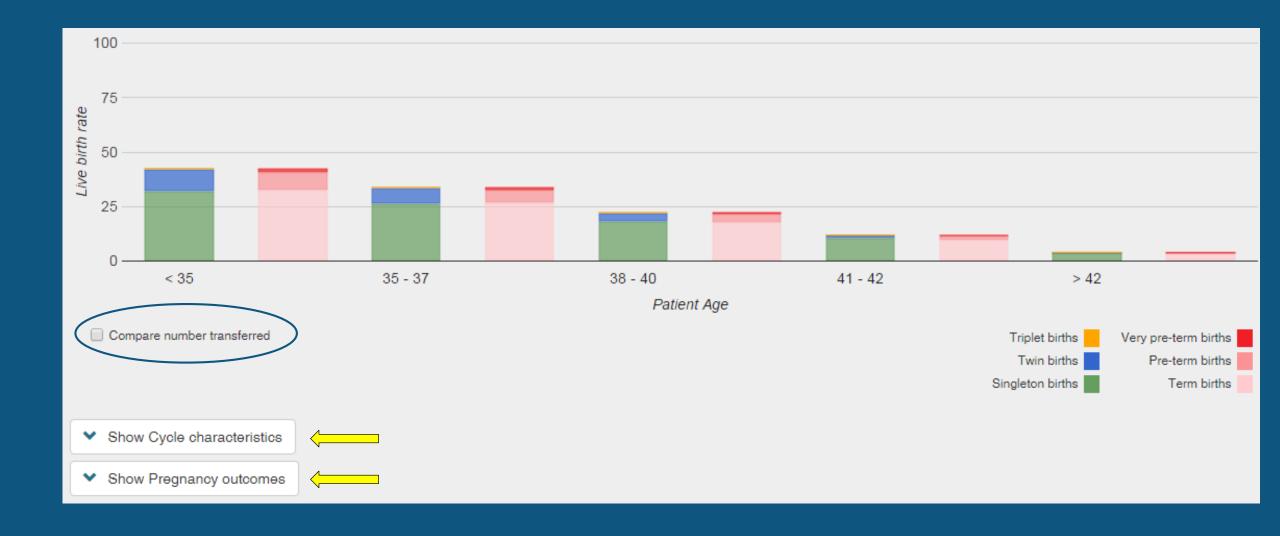
Live Birth Per Patient

PATIENT'S OWN EGGS

PRELIMINARY CUMULATIVE OUTCOME PER INTENDED EGG RETRIEVAL



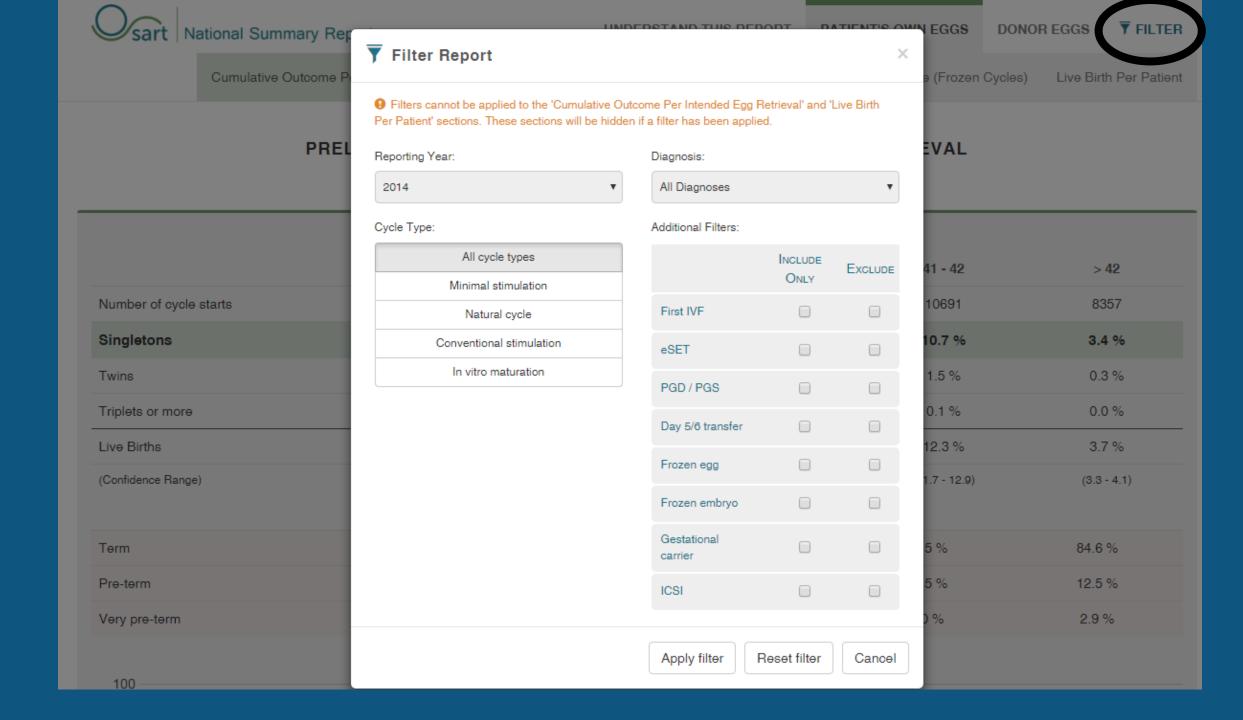
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Sart National Summary Report		UNDERSTAND THIS	REPORT	PATIENT'S OWN EGGS	DONOR EGGS ▼ FILTER	
	Cumulative Outcome Per Intended E	Primary Outcome Per Intended Re	ətrieval	Subsequent Outcome (Frozen	Cycles) Live Birth Per Patient	
Patient Age ▲ Hide Cycle characteristics						
				Age of w	oman	
		< 35	35 - 37	38 - 4	40 41 - 42	> 42
Number of cycle	e starts	41304	21518	2055	10988	8621
Number of retrie	evals	39006	19723	1830	9483	7216
Cancelled cycle	98	5.6 %	8.3 %	10.9	% 13.7 %	16.3 %
Retrievals with	no embryos suitable for transfer	3.7 %	6.1 %	10.2	% 15.8 %	23.2 %
Mean number	of embryos transferred	1.0	1.8	2.0	2.4	2.0
eSET % (elect	tive Single Embryo Transfer)	32.4 %	23.0 %	15.3	% 11.0 %	10.3 %

▲ Hide Pregnancy outcomes			Age of woman		
	< 35	35 - 37	38 - 40	41 - 42	> 42
Number of cycle starts	41304	21518	20551	10988	8621
Positive pregnancy test	57.3 %	48.4 %	36.9 %	24.8 %	11.7 %
Clinical pregnancies	49.0 %	40.7 %	29.6 %	18.7 %	7.6 %
Miscarriage rate	11.6 %	14.7 %	22.4 %	33.4 %	45.1 %
Number of retrievals	39006	19723	18302	9483	7216
Live birth per retrieval	45.1 %	36.9 %	25.0 %	13.8 %	4.7 %
Positive pregnancy test	60.6 %	52.7 %	41.3 %	28.6 %	13.9 %
Clinical pregnancies	51.8 %	44.3 %	33.2 %	21.6 %	9.1 %
Number of transfers	35634	17075	14309	6484	3963
Live birth per transfer	49.3 %	42.7 %	32.0 %	20.2 %	8.5 %
Positive pregnancy test	66.3 %	60.8 %	52.8 %	41.9 %	25.3 %
Clinical pregnancies	56.7 %	51.2 %	42.4 %	31.6 %	16.6 %
Implantation rate	42.6 %	34.4 %	23.5 %	13.2 %	5.6 %







What cycles qualify as fertility preservation?



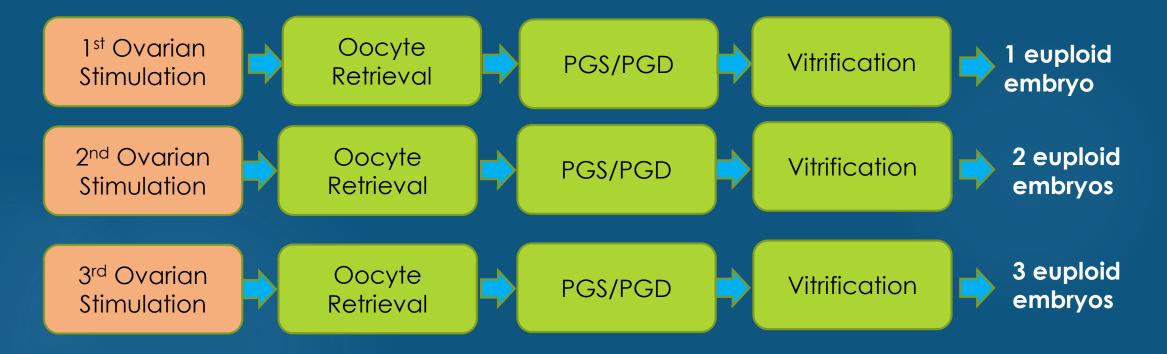
Fertility Preservation

Cycles that are initiated with no intention of performing embryo transfer within the next 12 months. The intent of treatment MUST be clearly documented in the medical record.

Fertility preservation cycles must be prospectively reported. (You cannot decide to call a cycle fertility preservation after the prospective reporting deadline.)

New Reporting





Note



- SART Validation Committee now selecting clinics on "outlier" basis, such as:
 - No cancellations
 - ▶ High rates of conversion from long term banking
 - High rates of fertility preservation with embryo banking
- Prospective reporting rates will go live with the 2016 data
- In FET cycles, PGS/PGD has to be indicated even if embryos are pulled from cycle already identified as including PGS

Changes to Data Collection



- More fields
- Adding value to SARTCORs for SART members

History

Clinic Index				
Clinic Cycle Id		Clinic Patient I	d 07-56606-2	
B-F				
Patient History				
Gravidity	3	₹	Surgical Sterilization	No ▼

Patient History			
Gravidity	3 ▼	Surgical Sterilization	No ▼
Biochemical Pregnancies	0 •	Prior Spontaneous Abortions	1 •
Prior Preterm Births (< 37 wks)	0 •	Prior Full Term Births (>=37 wks)	2 ▼
Prior Still Births	Not Entered ▼	Prior Ectopic Pregnancies	Not Entered ▼
Therapeutic Abortions	Not Entered ▼	Smoked 3 Months Prior to Start	Unknown ▼
Months Attempting Pregnancy Since I	ast Clinical Pregnancy		
0			
Patient Height	63 inches	Patient Weight	
Height Unknown		✓ Weight Unknown	

Save and go to Cycle List

Undo Changes (this form)

Complete Cycle

Next Tab >

Reason for ART Ovulation Disorders Male Infertility ✓ Medical Condition ✓ PCOS ✓ Genetic or chromosomal abnormality Hypothalamic Amenorrhea Diminished Ovarian Reserve Specify: Abnormal sperm parameters Other ovulation disorders Azoospermia, obstructive Oocyte or embryo banking Azoospermia, non-obstructive ✓ Indication for use of gestational carrier Oligospermia, severe(< 5 million / mL) Absence of uterus Oligospermia, moderate (5 - 15 million / mL) Significant uterine anomaly Low Motility(< 40%) Medical contraindication to pregnancy Low Morphology(4 %) Recurrent pregnancy loss □ Very Severe Male Factor (< 1 million) </p> Unknown ✓ Other male factor Recurrent pregnancy loss Specify: History of Endometriosis Other (Genetic PGT) Tubal Ligation (Not Reversed) Other (Non-Infertile) Tubal Hydrosalpinx (In Place) Communicating Unexplained (clears all diagnoses) Occluded Unknown

Other Tubal Disease

Uterine



Patient Medication				
Start Date 01/05/2017				
Clomiphene	Other Medication		GnRH	Agonist Flare
✓ FSH IUs	Ovulation Trigger	Not Entered ▼		Agonist Suppression
Medication with LH/HCG Activity	Unstimulated	HCG Only		Antagonist Suppression
☐ Tamoxifen	Minimal Stimulation	GnRH Agonist Only Both HCG/GnRHa		
Aromatase Inhibitors		No Trigger Used Other		

ART Treatment Cycle occurred as intended Cycle Type Other (combination cycles, research, oocyte banking, oocyte thawing, etc.) ▼ Cycle Type Details Oocyte/Embryo State Oocyte Source Transfer Method ✓ Autologous Fresh Embryo ✓ Transcervical (IVF) Donor Oocyte ✓ Thawed Embryo Zygotes to tubes (ZIFT or TET) Donor Embryo ✓ Thawed Oocyte ☐ Gametes to Tubes (GIFT) Long Term Banking for Fertility Preservation Short-Term Freeze-All ▼ Thaw for Refreeze Oocyte Banking for Fertility Preservation Only Delay of transfer to obtain genetic information (Fresh Only) Embryo Banking for Fertility Preservation Only Delay of transfer for other reasons (Fresh Only) Gestational Carrier Converted From IUI Invitro Maturation Research



Micromanipulation and Fertilization



Intracytoplasmic Sperm Injection | All Mature Oocytes ▼

ICSI Indication (Check all that apply)

Prior Failed Fertilization

Laboratory Routine

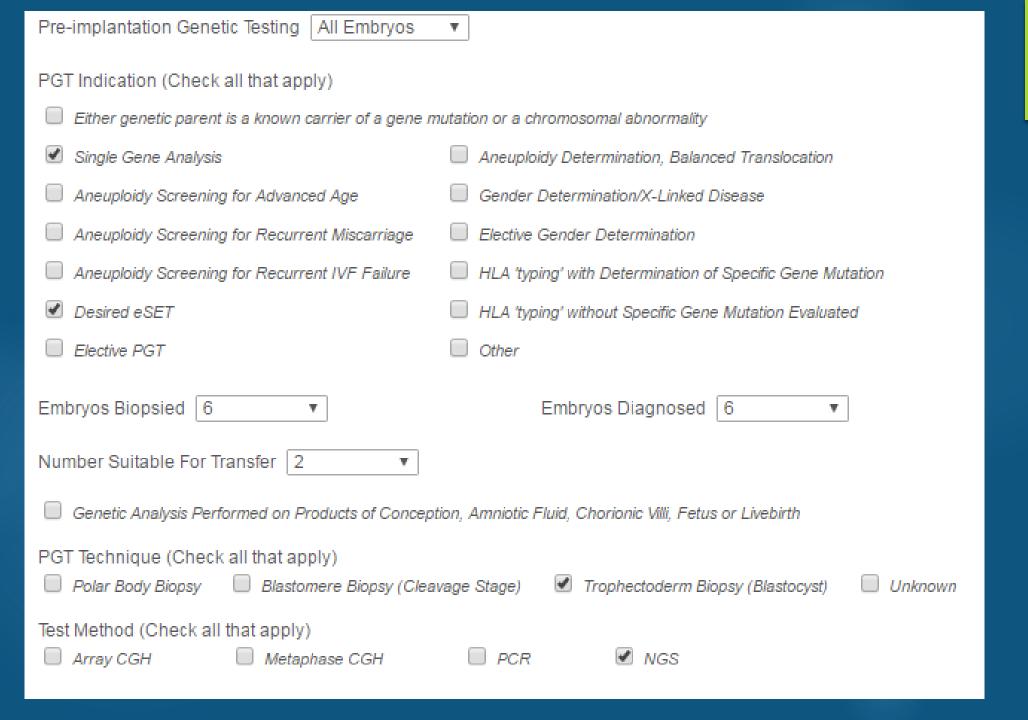
Prior Poor Fertilization

Frozen Oocytes

PGT

- Rescue ICSI
- Abnormal Semen Parameters
- Other

Low Oocyte Yield









Q: Why are some of our cycle starts for egg retrieval omitted from the Primary or Cumulative outcome tables of the preliminary report?

A: DELAYED CYCLES

Q: How can I get to our frozen embryo transfer outcomes?

A: Use the filter, look at data in the primary and subsequent tables.

PRELIMINARY PRIMARY OUTCOME PER INTENDED RETRIEVAL



			Age of woman	
	< 35	35 - 37	38 - 40	41 - 42
Number of cycle starts	222	164	129	64
Singletons	35.1 %	28.7 %	32.6 %	21.9 %
Twins	21.6 %	21.3 %	4.7 %	6.2 %
Triplets or more	0.9 %	1.2 %	0 %	0 %
Live Births	57.7 %	51.2 %	37.2 %	28.1 %



Type of ART and Procedural Factors a					Patient Diagno	sis ^b		
IVF Unstimulated Used gestational carrier	100% 7% 2%	With ICSI PGD/PGS		Tubal factor Ovulatory dysfunction Diminished ovarian reserve Endometriosis	7% 28%	Uterine factor Male factor Other factor Unknown factor	2% 22% 30% 14%	

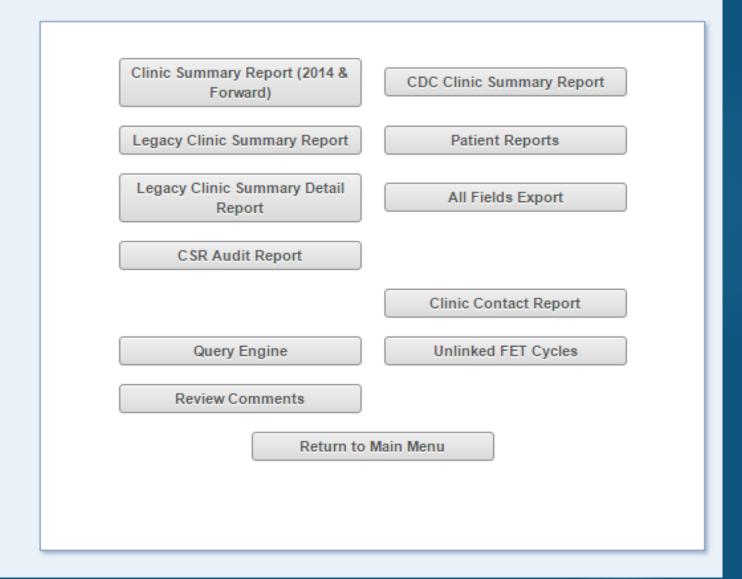
2014 ART SUCCESS RATES

Total number of cycles^d: 1,393 (includes 1 cycle[s] using frozen eg

Time of Cuelo			Age of	Woman
Type of Cycle	<35	35-37	38-40	41-42
Fresh Embryos from Nondonor Eggs				
Number of cycles	176	109	56	34
Percentage of cancellations before retrieval (%)	2.3	11.9	25.0	14.7
Average number of embryos transferred	1.8	1.8	1.6	1.7
Percentage of embryos transferred resulting in implantation (%)	61.9	54.4	50.0	6/16
Percentage of elective single embryo transfers (eSET) (%)	14.4	15.0	26.1	1/7
Outcomes per Cycle				
Percentage of cycles resulting in term, normal weight & singleton live births (%)	31.3	22.9	21.4	8.8
Percentage of cycles resulting in singleton live births (%)	35.8	24.8	21.4	11.8
Percentage of cycles resulting in twin live births (%)	21.6	20.2	5.4	2.9
Percentage of cycles resulting in live births (%)	58.5	45.9	26.8	14.7



Would it be helpful if you could build your own queries?



Please Remember...



- ▶ This is version 1 and can/will be adjusted
- Feedback is needed and encouraged!

Many contributors including:
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