

Female Fertility and Family Planning

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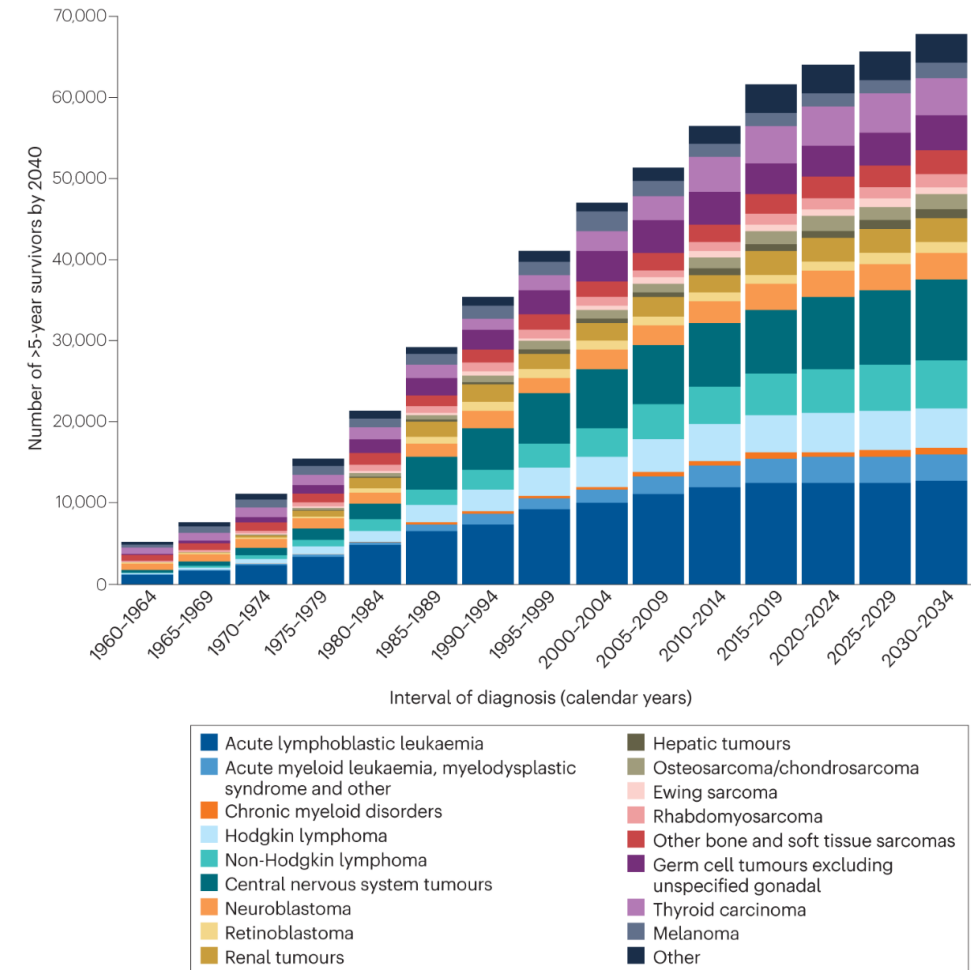
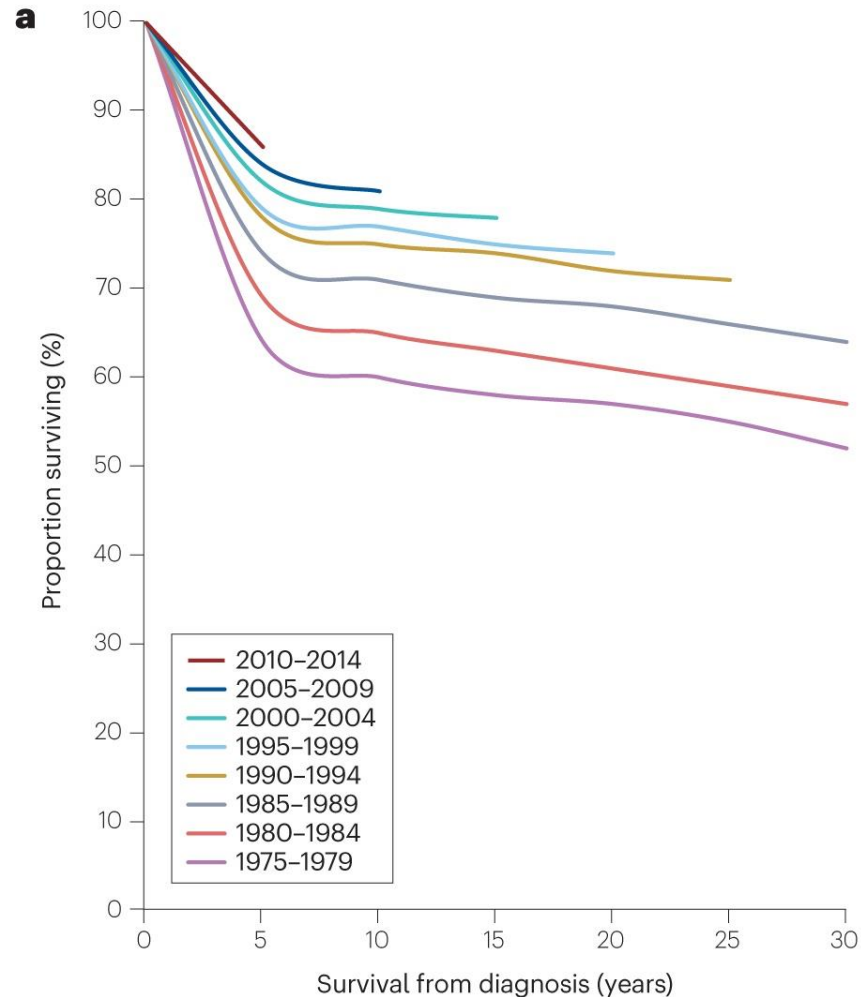
October 3, 2026

PEDIATRIC
Moving Beyond
Cancer
to Wellness

DISCLOSURES

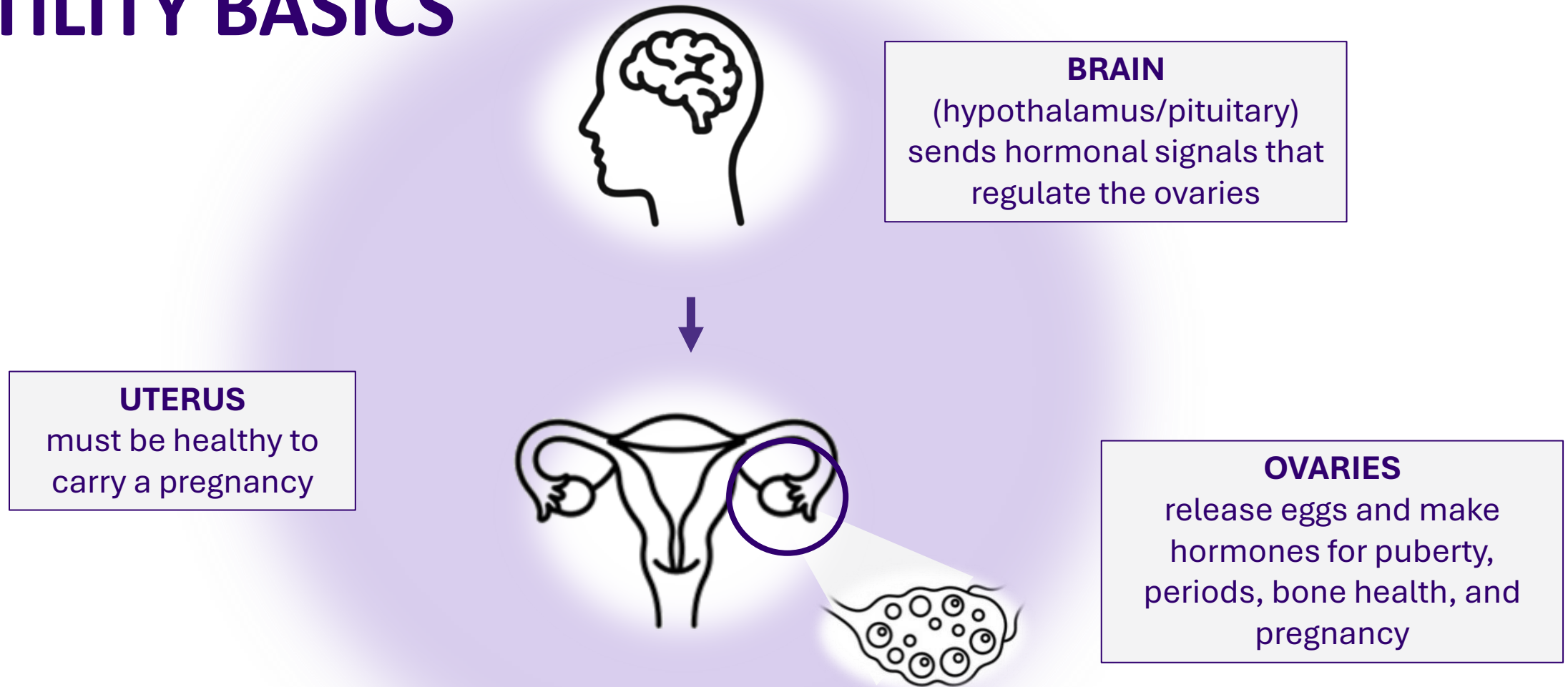
- Nothing to disclose

WHY THIS TALK MATTERS



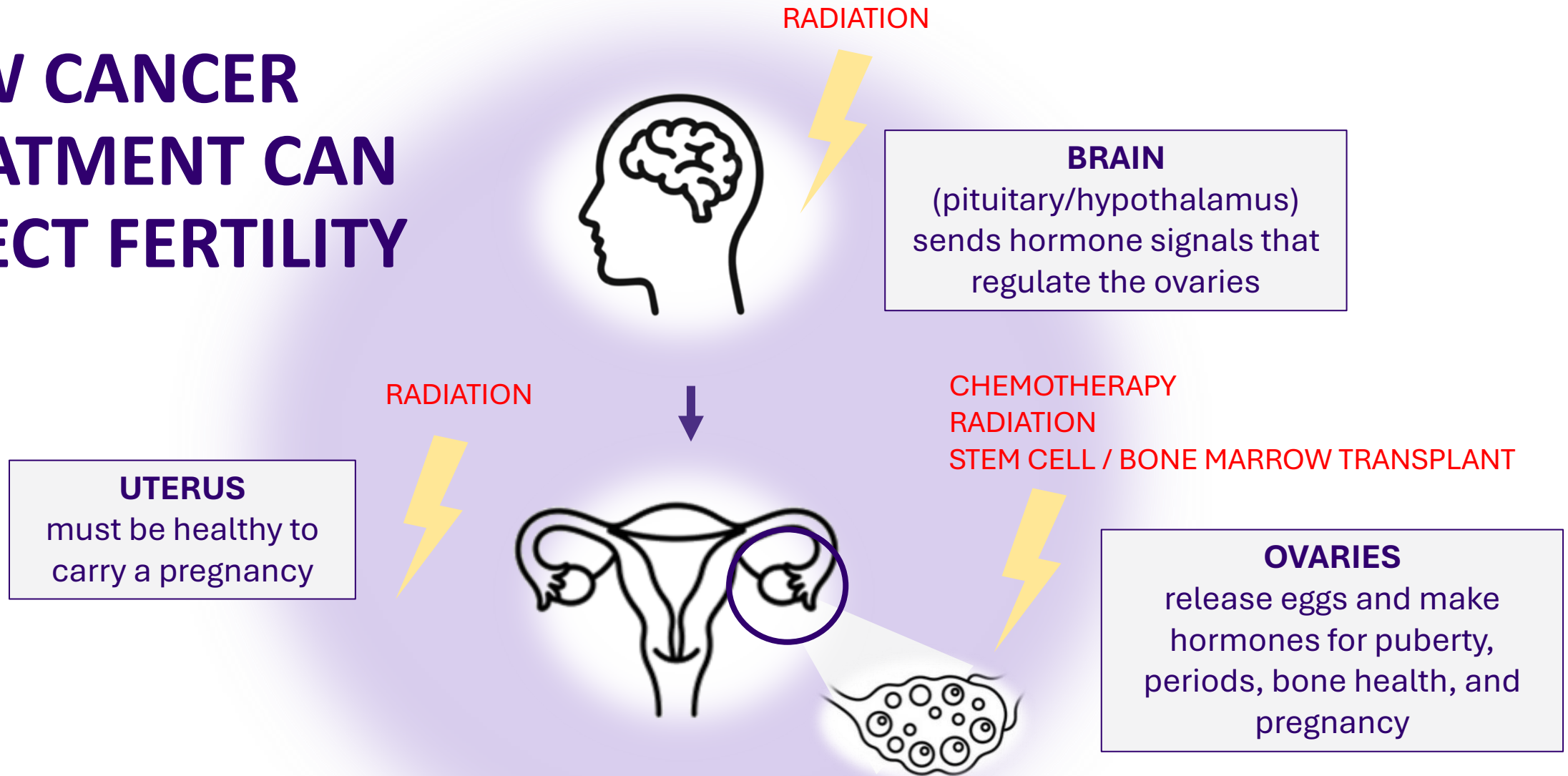
Ehrhardt, M.J., Krull, K.R., Bhakta, N. *et al.* Improving quality and quantity of life for childhood cancer survivors globally in the twenty-first century. *Nat Rev Clin Oncol* **20**, 678–696 (2023). <https://doi.org/10.1038/s41571-023-00802-w>

FERTILITY BASICS



*Females are born with all eggs they will ever have.
The quantity and quality of eggs naturally decrease over time.*

HOW CANCER TREATMENT CAN AFFECT FERTILITY



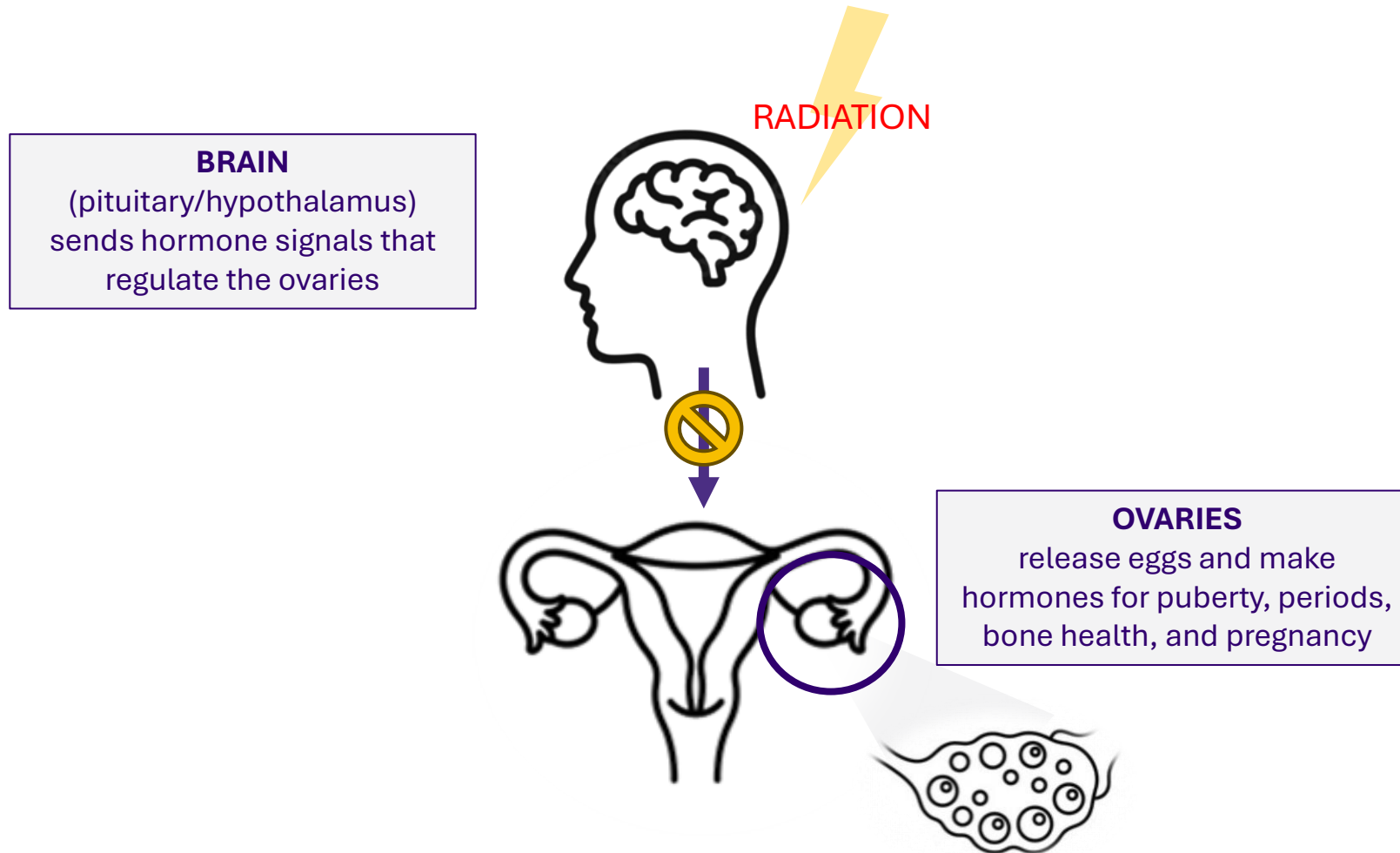
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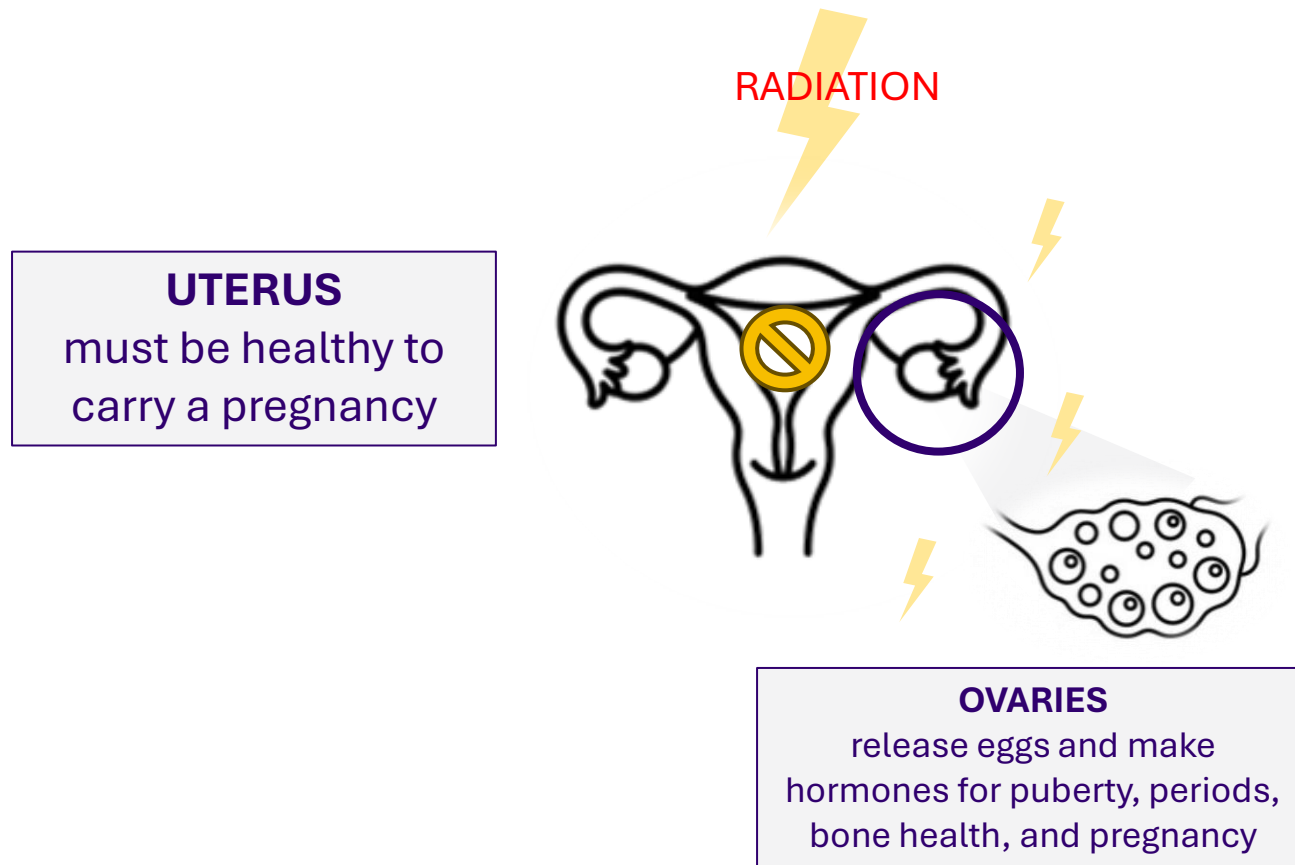
UNDERSTANDING THE RISK

Risk depends on the specific treatment, the dose, and age at treatment —
it is not the same for everyone. *Some treatments carry little or no added risk.*

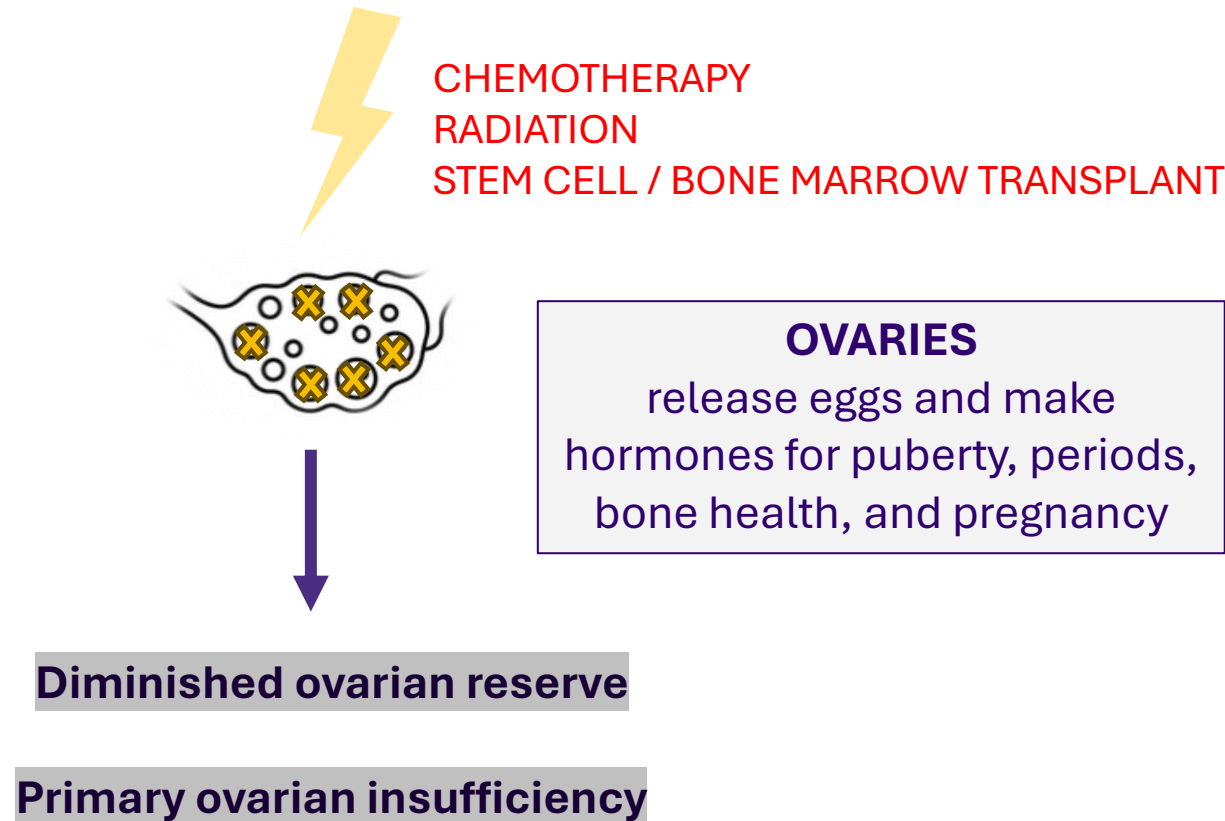
UNDERSTANDING THE RISK TO THE BRAIN



UNDERSTANDING THE RISK TO THE UTERUS



UNDERSTANDING THE RISK TO THE OVARIES



UNDERSTANDING THE RISK

Intervention	Site	Pubertal Status	Risk Level		
			Minimally Increased Risk	Significantly Increased Risk	High Level of Increased Risk
Alkylators (CED* gm/m ²)		Prepubertal	CED < 8	CED 8 - 12	CED > 12
		Postpubertal	CED < 4	CED 4 - 8	CED > 8
Heavy metal			Cisplatin		
			Carboplatin		
Hematopoietic stem cell transplant					Alkylator +/- Total body irradiation; Myeloablative and Reduced Intensity Regimens
Radiation exposure	Ovary	Prepubertal		< 15 Gy	≥ 15 Gy
		Postpubertal		< 10 Gy	≥ 10 Gy
	Hypothalamus		22 - 29.9 Gy	30 - 39.9 Gy	> 40 Gy

ASK YOUR CARE TEAM: Which risk category was my treatment?

WHY AGE AND PUBERTY MATTERS

- Younger/prepubertal females generally start with more eggs, offering some protection.
- Even so, treatment can still shorten the reproductive window and lead to earlier menopause.
- Pubertal and older females are sensitive to chemotherapy and radiation effects on the ovary.



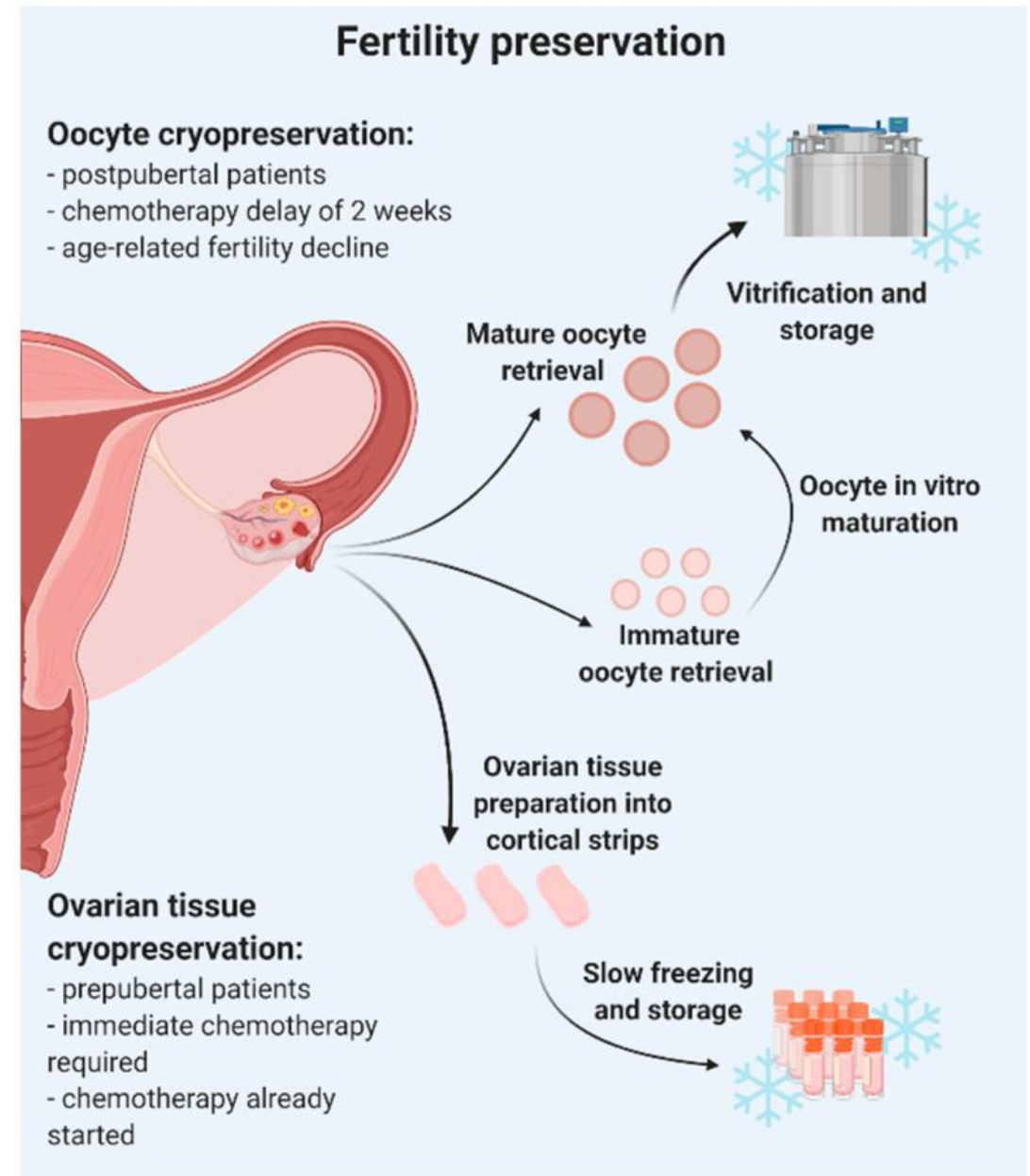
POST-TREATMENT FERTILITY OPTIONS

Fertility preservation is still possible for many people after treatment if enough ovarian reserve remains



FERTILITY PRESERVATION AFTER TREATMENT

- Oocyte (egg) or embryo freezing (IVF)
- Ovarian tissue cryopreservation



FERTILITY PRESERVATION AFTER TREATMENT

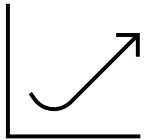
Egg freezing or embryo freezing (IVF)



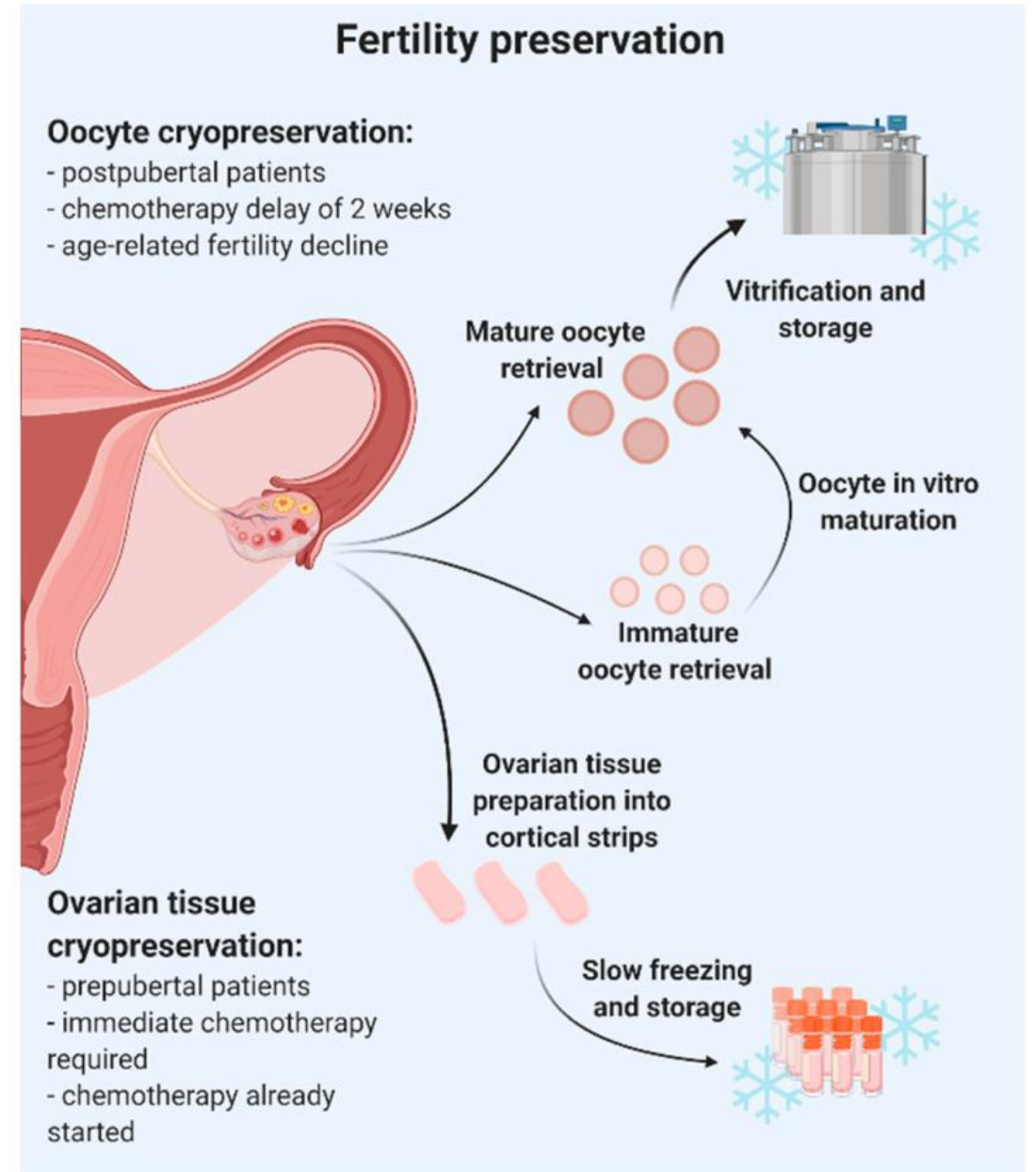
Most established method



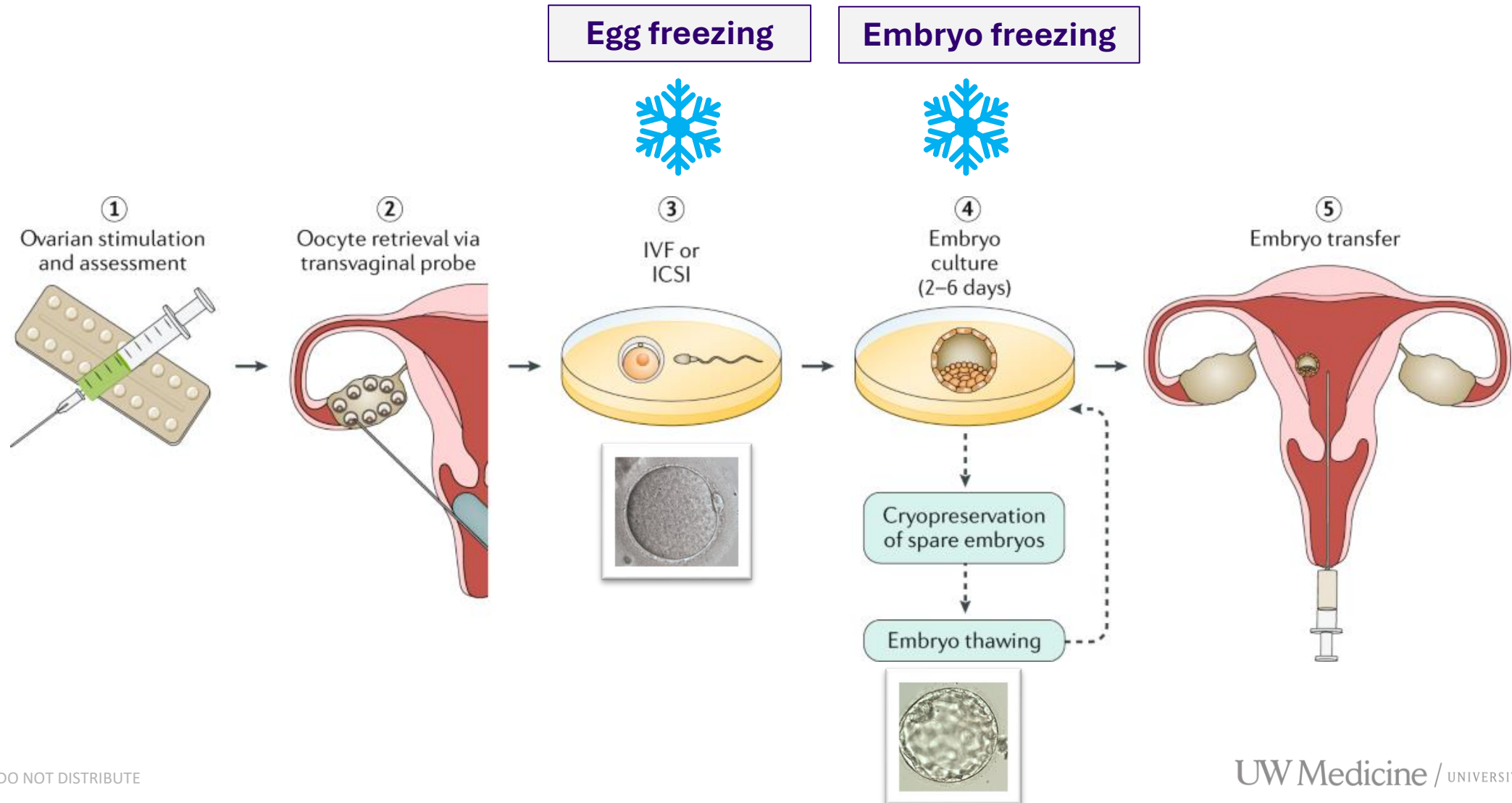
Takes weeks



Not an option if pre-pubertal

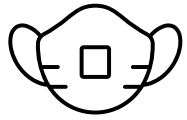


EGG (OR EMBRYO) FREEZING



FERTILITY PRESERVATION AFTER TREATMENT

Ovarian tissue freezing



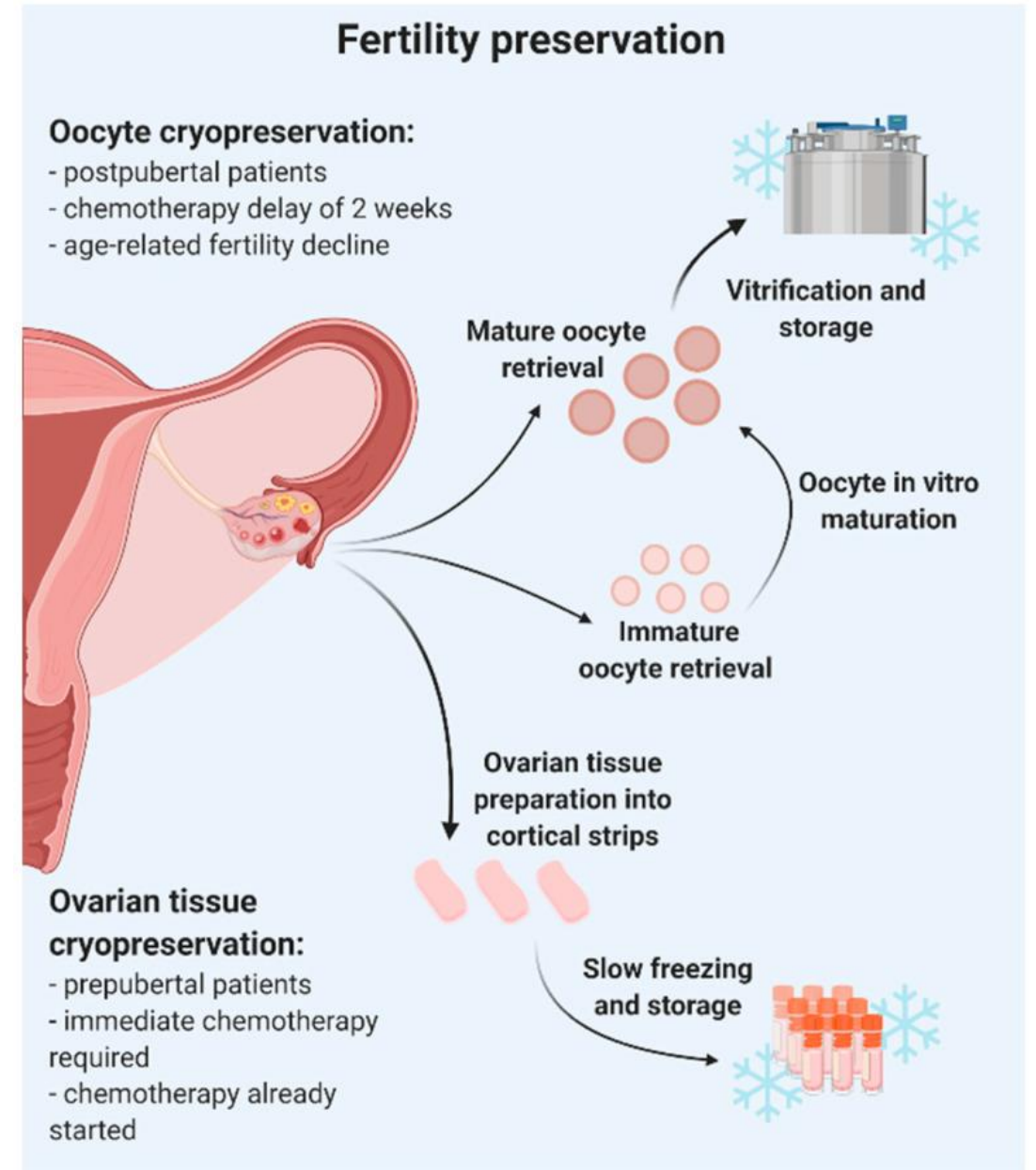
Requires surgery



Newer tech, limited success

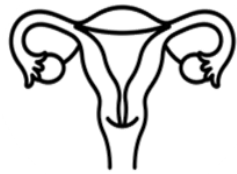


Limited access



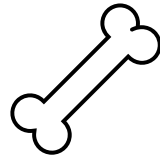
HORMONES ARE IMPORTANT FOR OTHER THAN FERTILITY

If ovaries are not making hormones (ovarian insufficiency),
hormonal replacement can prevent negative impacts on:



SEXUAL HEALTH /

EARLY MENOPAUSE SIDE EFFECTS

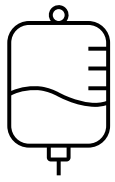


BONE HEALTH



HEART HEALTH

RISK TO FUTURE PREGNANCY



History of chemotherapy generally does not increase birth defects, and children are not at increased inherited risk from parental treatment (aside from specific inherited cancer syndromes)



Pelvic/abdominal radiation to the uterus have higher rates of preterm birth, low birth weight, and miscarriage

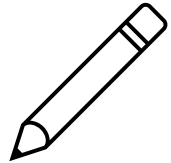


Heart-affecting chemo or chest radiation – patients should have a heart check (echocardiogram) before pregnancy

RISK TO FUTURE PREGNANCY



Preconception counseling with Maternal-Fetal Medicine (high-risk OB specialist) is highly recommended



Overall live birth rates are somewhat lower than in the general population, so early planning helps.

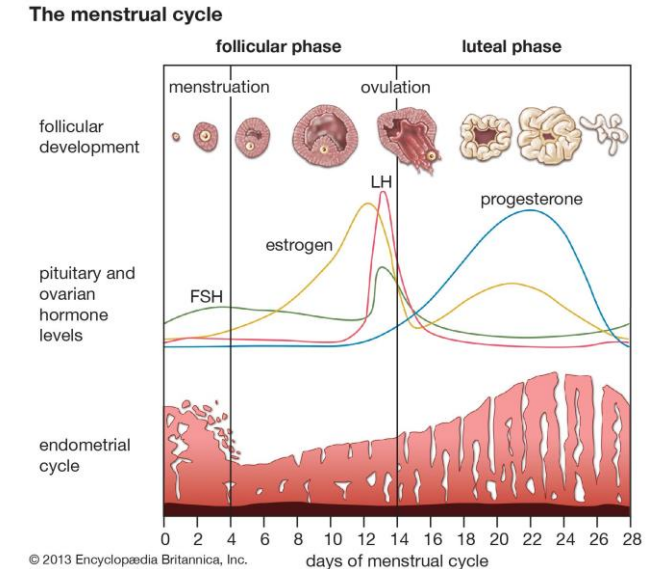
AM I A CANDIDATE FOR POST-TREATMENT FERTILITY PRESERVATION?

The only way to know is a proper evaluation by a fertility specialist.

AM I A CANDIDATE FOR POST-TREATMENT FERTILITY PRESERVATION?

The only way to know is a proper evaluation by a fertility specialist.

- **Ask for a referral** to Reproductive Endocrinology and Infertility (REI)
- **Monitor** menstrual cycles or puberty
- **Know** your risk category
- **Work up** may include ovarian function testing
 - Hormonal profile (i.e. AMH, FSH, estradiol)
 - Ultrasound of uterus and ovaries



OTHER CONSIDERATIONS



Emotional



Financial



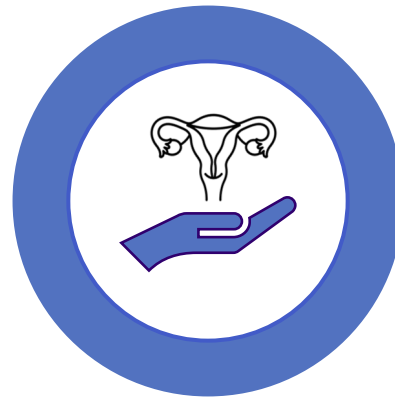
Privacy

OTHER PATHS TO PARENTHOOD

Families can be built in many ways



Donor



**Gestational
carrier**



Adoption

Your Care Team – you do not have to figure this out alone

Multidisciplinary team approach

- Oncologist
- Reproductive endocrinologist/fertility specialist
 - Fertility nurses
 - Embryologists
 - Financial access specialists
 - Reproductive genetic counselor
 - Mental health support
- Maternal-fetal medicine
- And others

Center for Reproductive Health and Fertility (CRHF) at UW



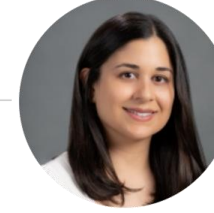
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Emalee R. Danforth, CNM, MSN

*Third party reproduction
Complex menopausal care*



Angela Petlow, ARNP
Complex menopausal care



Mary Sienkiewicz, ARNP
Oncofertility

Questions to Ask Your Care Team

What was my (or my child's) fertility risk level based on the treatments given?

Do I still have preservation options now?

When should I see a fertility specialist?

If I want to get pregnant someday, what extra monitoring will I need?

What contraception is right for me if I am not ready for pregnancy?

Key Takeaways

Fertility risk depends on the treatment, dose, and age — ask where you fall.

Do not assume infertility, and do not assume protection.

The best options come from planning, and options exist after treatment too.

Most survivors can build a family; some pregnancies need extra care.

RESOURCES



SAVEMYFERTILITY

*An Online Fertility Preservation Toolkit for
Patients and Their Providers*



resolve

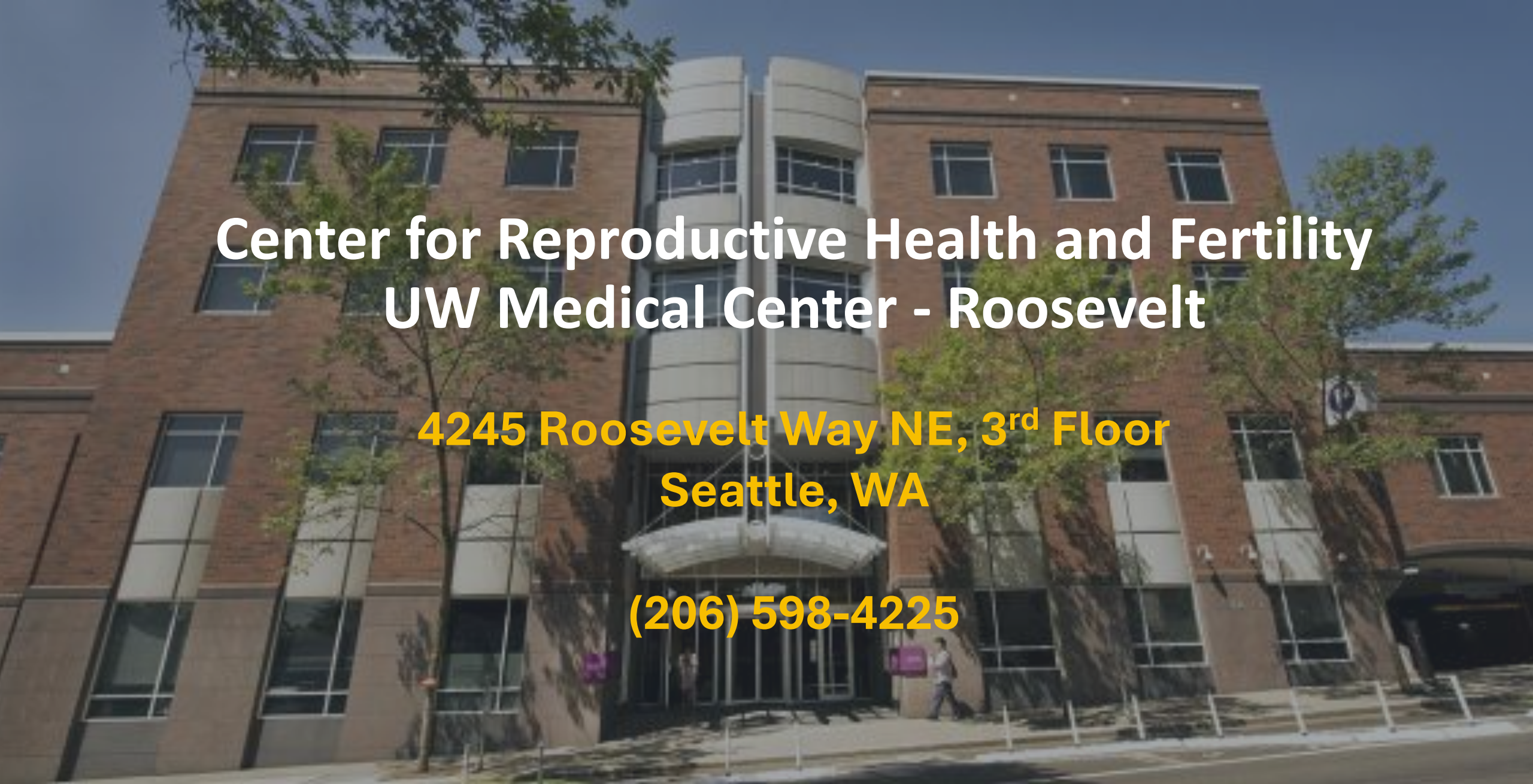
L I V E S T R O N G[®]
fertility



ReproductiveFacts.org

News and Publications

Patient Advocacy



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QUESTIONS?

