MARVIX AI

# SAMPLE FERTILITY / REPRODUCTIVE ENDOCRINOLOGY SOAP NOTE

ONCOFERTILITY — EGG FREEZING BEFORE CHEMOTHERAPY

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## 1 PATIENT INFORMATION

### 1 PATIENT DETAILS

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|---|---|
| NAME | Yusra A. Benhamida |
| DOB | 04/11/1994 |
| AGE / SEX | 32 yrs / Female |
| MRN / PATIENT ID | RE-45119 |
| DATE OF SERVICE | 08/20/2026 |
| PROVIDER | Colette M. Iwuchukwu, MD |
| CREDENTIALS | MD — Reproductive Endocrinology & Infertility |
| PRIMARY OB-GYN PROVIDER | Beth Larkin-Cho, MD |
| VISIT TYPE | Fertility preservation consultation — urgent, pre-chemotherapy oocyte cryopreservation |
| CARE SETTING | Outpatient Fertility Clinic, academic center; oncofertility pathway |
| PRIMARY CARE PROVIDER | Nadia Farrow, MD |
| REFERRING PROVIDER | Medical oncology — Elias Vantorre, MD (breast oncology) |
| PARTNER NAME / DOB | Not applicable — single, no partner; consented documentation of no partner |
| INTERPRETER USED | None required — declined, fluent in English |
| CHAPERONE PRESENT | Yes — Robin Aldaz, RN, for the transvaginal ultrasound |

## CC CHIEF COMPLAINT

### 2 PRIMARY FERTILITY CONCERN

"I was diagnosed with breast cancer eleven days ago and my oncologist says chemotherapy starts in about three weeks. I don't have a partner and I have always wanted children. I need to know whether I can freeze my eggs in time and whether doing it is safe with a hormone-sensitive tumour."

# S SUBJECTIVE

## 3 FERTILITY GOALS, REPRODUCTIVE HISTORY & ENDOCRINE CONTEXT

### 3a REASON FOR EVALUATION, GOALS & INFERTILITY HISTORY

#### Reason for Fertility / Reproductive Endocrinology Evaluation

**Urgent fertility preservation consultation** for a 32-year-old with newly diagnosed stage IIA, grade 2, ER-positive, PR-positive, HER2-negative invasive ductal carcinoma of the left breast, referred by medical oncology **before** initiation of neoadjuvant chemotherapy. Purpose: counsel on gonadotoxic risk, assess ovarian reserve, determine feasibility within the oncology treatment window, and proceed to **oocyte cryopreservation** if the timeline permits. This is not an infertility evaluation — she has no known infertility and has never attempted conception.

#### Fertility Goals and Timeline

**The timeline is the central clinical constraint.** Oncology plans to begin neoadjuvant doxorubicin, cyclophosphamide, and paclitaxel in approximately 21 days (target 09/10/2026), and Dr. Vantorre has confirmed in writing that a 2-week delay is acceptable but a longer one is not. She desires biological children — ideally two — but is currently single and not in a relationship, so **oocyte rather than embryo cryopreservation** is the appropriate route; she has considered and declined donor sperm for embryo creation, wishing to preserve future partner choice. She is cycle day 3 today, which is fortuitous: a random-start or day-3 antagonist protocol can begin immediately.

#### Infertility History

**None.** Nulligravid, never attempted conception, never used fertility treatment, no prior fertility evaluation. No known contributing factors to infertility. She has used contraception consistently since age 19 and has no reason to suspect subfertility. This is prognostically favourable and was pointed out to her explicitly, as many oncofertility patients assume the diagnosis implies infertility.

### 3b MENSTRUAL, OVULATION & PREGNANCY HISTORY

#### Menstrual History

Menarche age 12. **Last menstrual period 08/18/2026 — cycle day 3 today.** Cycles regular at 28–30 days lifelong, bleeding 4–5 days, moderate flow without clots or flooding. Mild dysmenorrhea 3/10 on day 1, ibuprofen-responsive. No intermenstrual or postcoital bleeding. No amenorrhea or oligomenorrhea except while on combined oral contraceptives. Mild premenstrual breast tenderness and mood change. No perimenopausal features at 32. She stopped her combined oral contraceptive 14 months ago and resumed regular ovulatory cycles within two months.

#### Ovulation History

Regular predictable cycles with mid-cycle mucus change and reliable premenstrual symptoms — clinically strongly suggestive of ovulation. She has never used ovulation predictor kits, basal body temperature tracking, or mid-luteal progesterone testing, as she has not been trying to conceive. No history of anovulation or ovulation induction. Cycle regularity plus today's antral follicle count and AMH together support normal ovulatory function.

#### Pregnancy History

**G0 P0.** No prior pregnancies, live births, miscarriages, biochemical pregnancies, ectopic or molar pregnancies, or terminations. Urine hCG negative today before any medication. No prior time-to-conception data available.

#### Recurrent Pregnancy Loss History

Not applicable — no prior pregnancy or loss.

### 3c GYNECOLOGIC, ENDOCRINE & PARTNER FACTORS

#### Gynecologic History

No PCOS — regular cycles, no hyperandrogenic features, no prior polycystic morphology reported. No endometriosis diagnosis, no chronic pelvic pain, no dyspareunia. No fibroids, adenomyosis, or ovarian cysts on any prior imaging. No pelvic inflammatory disease, no STIs, no tubal or pelvic surgery. Pap and HPV co-test 02/2025: negative, HPV-negative. No abnormal cytology, no cervical procedures. No known uterine anomaly. No prior gynecologic imaging apart from today's

study.

### Endocrine / Hormonal Symptoms

No acne beyond occasional premenstrual lesions, no hirsutism, no scalp hair thinning. Weight stable within 4 lb for 3 years until an intentional 6 lb loss in the past month attributable to diagnosis-related appetite change and stress. **No galactorrhea** — specifically asked, given the breast diagnosis and the need to exclude hyperprolactinemia. No hot flashes or night sweats. No vaginal dryness. Libido reduced over the past 2 weeks, situational. No thyroid symptoms, no heat or cold intolerance. Fatigue moderate and clearly diagnosis-related. No headaches, no visual field symptoms.

### Partner / Male Factor History

**Not applicable — no partner.** Documented deliberately, because it determines the preservation modality: oocyte rather than embryo cryopreservation. Donor sperm for embryo creation was offered and discussed in detail (embryos historically survive thaw somewhat better, but oocytes preserve full future reproductive autonomy and avoid disposition disputes) — she declined donor sperm after a considered discussion, and her reasoning was documented.

## 3d PRIOR TESTING, TREATMENT & CONTEXT

### Prior Fertility Testing

**None before this episode.** All reproductive testing was obtained urgently over the past 5 days as part of this consultation and is detailed in the laboratory section: AMH, cycle day 3 FSH, LH, estradiol, TSH, free T4, prolactin, HbA1c, infectious and preconception serologies, and today's transvaginal ultrasound with antral follicle count. No prior HSG, saline sonogram, hysteroscopy, or laparoscopy — and none indicated, since tubal and cavity assessment is not required for oocyte retrieval and would waste irreplaceable time.

### Prior Fertility Treatments

None. No timed intercourse, ovulation induction, letrozole, clomiphene, gonadotropins, IUI, IVF, ICSI, PGT, or donor gamete use. Treatment-naive, which simplifies protocol selection but means she has no known stimulation response to guide dosing.

### Medication and Supplement History

Current: none regularly apart from a prenatal-type multivitamin with folic acid started 5 days ago on our advice, acetaminophen PRN, and lorazepam 0.5 mg PRN prescribed by oncology for procedural anxiety (used twice). **Combined oral contraceptive stopped 14 months ago**; no hormonal contraception since. No herbal or over-the-counter supplements — she was specifically counselled against high-dose supplements and unregulated "fertility" products during stimulation. No prior fertility medications. No known drug allergies. Oncology medications not yet started. Insurance: employer plan with a state fertility-preservation mandate applicable to iatrogenic infertility — benefits verification initiated and largely favourable.

### Fertility Preservation Context

**Reason:** anticipated gonadotoxicity from neoadjuvant chemotherapy for stage IIA ER-positive, PR-positive, HER2-negative invasive ductal carcinoma of the left breast (diagnosed 08/09/2026 by core biopsy; 2.4 cm lesion with one clinically suspicious axillary node). **Regimen:** dose-dense doxorubicin and cyclophosphamide followed by paclitaxel — cyclophosphamide being the principal ovarian toxin, with a meaningful risk of diminished reserve and a smaller risk of permanent ovarian insufficiency at her age. **Additional consideration:** ER-positive disease will require 5–10 years of adjuvant endocrine therapy after chemotherapy, during which pregnancy is contraindicated — so her reproductive window is deferred to roughly age 39–42 even if her ovaries recover, which makes preservation valuable independent of chemotherapy risk. **Timeline:** chemotherapy target 09/10/2026, with a 2-week delay authorised in writing by oncology. **Goals:** a target of 15–20 mature oocytes, which may require two cycles if the first yield is low and the window allows. **Consent:** discussed today; written consents for stimulation, retrieval, cryopreservation, and long-term storage to be executed before the first injection. **Coordination:** direct communication with Dr. Vantorre established, breast surgery aware, and the multidisciplinary tumour board notified.

### Preconception Health

No chronic medical conditions. BMI 23.1, stable. Non-smoker, never smoked. Alcohol 1–2 drinks monthly. No substance use. Exercises 3–4 times weekly (running and yoga), currently reduced. Immunizations up to date including HPV series completed at 19; rubella and varicella immune. Folic acid started. Occupational exposures none — she is a landscape architect working primarily in an office. No genetic risk previously identified, though her family history now warrants

assessment (below).

### Family History

**Mother: breast cancer at 44**, ER-positive, treated with surgery, chemotherapy, and tamoxifen; alive at 63. **Maternal aunt: ovarian cancer at 51**, deceased at 54. Maternal grandmother: breast cancer in her fifties, details unavailable. Father: healthy at 66. No known BRCA testing in the family — her mother was diagnosed before testing was routinely offered and has never been tested. No infertility, early menopause, or recurrent pregnancy loss in the family. No clotting disorders, no PCOS, no endometriosis, no thyroid disease. **This pedigree — breast cancer in a first-degree relative under 50, ovarian cancer in a second-degree relative, and her own diagnosis at 32 — meets criteria for germline testing and raises real concern for a hereditary breast and ovarian cancer syndrome**, with direct implications for both her cancer treatment and her reproductive planning.

### Social History / Psychosocial Context

Single, not currently in a relationship. Lives alone; mother has relocated temporarily to support her through treatment. Strong friend network. Landscape architect, full-time, employer supportive with medical leave arranged. Reliable transportation, 15 minutes from clinic — important given the monitoring frequency. **Stress is extreme and entirely situational:** she describes making "the biggest decisions of my life in eleven days." Financial concern about preservation costs and storage fees; the state mandate covers much of the cycle but not indefinite storage. No cultural or religious objection to cryopreservation, though she asked about disposition should she not survive — addressed in consent. No transportation, childcare, or language barriers.

### Pertinent Negatives

Denies pelvic pain, abnormal or heavy uterine bleeding, and fever. **No galactorrhea, no headaches, and no visual field changes** — assessed to exclude a prolactinoma. No prior ovarian stimulation and therefore no history of hyperstimulation. No chest pain, dyspnea, unilateral leg swelling, or calf pain — documented as a thromboembolic baseline before stimulation in a patient with malignancy, which itself confers prothrombotic risk. No acute abdominal pain. No bone pain, no cough, no weight loss beyond the intentional loss, and no neurologic symptoms — oncology staging is negative for metastatic disease.

## ROS FERTILITY / REPRODUCTIVE ENDOCRINOLOGY REVIEW OF SYSTEMS

### 4 PERTINENT POSITIVES & NEGATIVES

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| Menstrual | **Positive: regular 28–30 day cycles, mild day-1 dysmenorrhea 3/10, currently cycle day 3. Negative for amenorrhea, oligomenorrhea, heavy bleeding, and intermenstrual bleeding.** |
| Pelvic | **Negative for pelvic pain, dyspareunia, bloating, ovarian cyst symptoms, and endometriosis-related symptoms.** |
| Androgenic and vasomotor | **Negative for hirsutism, scalp hair thinning, significant acne, acanthosis nigricans, hot flashes, night sweats, and vaginal dryness. Positive for intentional 6 lb weight loss over one month, stress-related.** |
| Pituitary and thyroid | **Negative for galactorrhea, headaches, and visual field symptoms (prolactinoma screening). Negative for thyroid symptoms and heat or cold intolerance. Positive for moderate fatigue, diagnosis-related.** |
| Pregnancy | **Not applicable — nulligravid, urine hCG negative today.** |
| Medication and stimulation | **No fertility medications yet started; no injection-site reactions, no ovarian hyperstimulation symptoms. Lorazepam PRN used twice without adverse effect.** |

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| Male factor | **Not applicable — no partner. Donor sperm offered and declined; oocyte cryopreservation elected.** |
| Psychosocial | **Positive: severe situational distress and anticipatory grief — GAD-7 15 (moderate-to-severe), PHQ-9 11 (moderate), FertiQoL emotional subscale low. Negative for suicidal ideation, hopelessness, and prior psychiatric history.** |

## O OBJECTIVE

### 5 OBSERVED FINDINGS

### V VITALS

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| TEMPERATURE<br>**98.0 °F** | BLOOD PRESSURE<br>**114/72 mmHg** |
| HEART RATE<br>**80 bpm, regular** | RESPIRATORY RATE<br>**14/min** |
| OXYGEN SATURATION<br>**99% on room air** | HEIGHT<br>**5′ 7″ (170 cm)** |
| WEIGHT<br>**147 lb (66.7 kg)** | BMI<br>**23.1 kg/m²** |
| PAIN SCORE<br>**2/10 — left breast biopsy site** | CYCLE DAY<br>**Day 3 (LMP 08/18/2026)** |

### 5a FOCUSED EXAMINATION

**General Appearance**

Alert, well groomed, articulate and organized. Normal build, well nourished, well hydrated. No distress physically. Emotionally strained — tearful twice during the consultation, particularly when discussing the possibility of never carrying a pregnancy — yet composed, asking precise questions and taking written notes. Arrived with a printed list of 14 questions, all of which were addressed.

**Head / Eyes / Neck**

Thyroid non-enlarged, smooth, no nodules or tenderness. No acne beyond a single premenstrual lesion, no hirsutism (modified Ferriman-Gallwey score 2), no temporal or vertex hair thinning, no acanthosis nigricans at the neck or axillae. **Visual fields full to confrontation and extraocular movements intact** — examined given the prolactin question. No cervical or supraclavicular lymphadenopathy on the right; left axillary and supraclavicular assessment deferred to oncology, whose examination documented a palpable 1.5 cm mobile left axillary node.

**Cardiovascular**

Rate 80 and regular, S1 and S2 normal, no murmur, rub, or gallop. Peripheral pulses 2+ and symmetric, capillary refill brisk. No peripheral edema. **No calf tenderness, unilateral swelling, or palpable cords** — documented as a pre-stimulation thromboembolic baseline, since both malignancy and ovarian stimulation raise thrombotic risk.

**Pulmonary**

Normal effort, clear to auscultation bilaterally, no wheeze or crackles. No accessory muscle use. Room air, saturation 99%. No pleural findings.

### Abdomen

Soft, flat, non-tender, non-distended. No masses, no organomegaly, no guarding or rebound. No surgical scars. Bowel sounds normal. **Baseline abdominal examination documented before stimulation** so that any subsequent distension, tenderness, or ascites attributable to hyperstimulation can be judged against a recorded starting point. No fluid wave, no shifting dullness.

### Breast Exam

**Limited and deferred to oncology and breast surgery, who are managing the primary lesion** — a full breast examination was not repeated to avoid unnecessary discomfort at the biopsy site. Inspection only, with the patient's consent and the chaperone present: left breast with a healing core-biopsy site at the upper outer quadrant, small ecchymosis, no cellulitis, no drainage, no skin dimpling or peau d'orange. **No nipple discharge and no galactorrhea on gentle expression bilaterally** — the finding relevant to this consultation. Right breast grossly normal on inspection.

### Pelvic Exam

Performed with chaperone (Robin Aldaz, RN) present and with consent, limited to what was needed for the transvaginal ultrasound and baseline assessment. External genitalia normal, no lesions. Vagina normal in calibre with normal rugation, moist, no discharge or atrophy. Cervix nulliparous, smooth, non-friable, no lesion, no discharge, no contact bleeding. **Uterus normal in size, anteverted, mobile, non-tender.** No adnexal mass or tenderness bilaterally. No cervical motion tenderness. No cul-de-sac nodularity or tenderness. Pelvic floor normal tone, no levator tenderness. Well tolerated; no limitations.

### Skin / Hair

Skin clear apart from the biopsy-site ecchymosis. No acne of significance, no hirsutism, no alopecia, no acanthosis nigricans, no striae — none of the phenotypic markers of hyperandrogenism or insulin resistance. No injection-site findings (treatment-naive). No bruising or petechiae elsewhere. Nails normal.

### Psychiatric

Mood distressed and appropriately so; affect reactive, tearful at two points and self-recovering. Thought process linear and organized; she prioritised her questions logically. Insight excellent — she articulated the trade-offs between delay and preservation without prompting. Judgment intact; fully capable of informed consent, which was specifically assessed and documented given the compressed timeline and emotional load. **No hopelessness, no suicidal ideation, no self-harm thoughts.** Sleep 4–5 hours with initial insomnia. Appetite reduced. Coping through information-seeking and her mother's support.

## RE REPRODUCTIVE ENDOCRINOLOGY ASSESSMENT

### 6 REPRODUCTIVE & ENDOCRINE FACTORS ASSESSED

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| Ovarian reserve status | **Normal for age — and favourable.** AMH 3.1 ng/mL, cycle day 3 FSH 6.4 IU/L with estradiol 41 pg/mL, and a total antral follicle count of 19 on today's scan. A good prognosis for a robust stimulation response and an important piece of reassurance for her. |
| Ovulatory function | **Normal — lifelong regular 28–30 day cycles with cyclic premenstrual symptoms and mucus change, normal day-3 gonadotropins, and no anovulatory history. Formal mid-luteal progesterone unnecessary and would waste time.** |
| Tubal patency status | **Not assessed and deliberately not pursued — tubal patency is irrelevant to oocyte retrieval and cryopreservation, and HSG would consume irreplaceable days. Would be evaluated years later if she required IUI or spontaneous conception.** |

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| Uterine cavity status | **Normal uterus on transvaginal ultrasound with a trilaminar 4.2 mm day-3 endometrium and no fibroid, polyp, or anomaly visualised. Saline sonogram and hysteroscopy deferred — not required before retrieval, and appropriately postponed to future transfer planning.** |
| Semen analysis / male factor | **Not applicable — no partner; donor sperm declined. Oocyte, not embryo, cryopreservation.** |
| Endometriosis or pelvic factor | **No clinical or sonographic evidence — no dysmenorrhea beyond mild, no dyspareunia, no endometrioma, no cul-de-sac nodularity or tenderness.** |
| PCOS or hyperandrogenism | **Absent. Regular ovulatory cycles, no hyperandrogenic signs (modified Ferriman-Gallwey 2), normal total and free testosterone and DHEA-S, and no polycystic morphology — 19 total antral follicles is normal, not polycystic. Relevant because PCOS would raise hyperstimulation risk.** |
| Thyroid, prolactin, adrenal, metabolic | **All normal — TSH 1.4 with normal free T4, prolactin 14 ng/mL (excluding hyperprolactinemia despite the breast diagnosis), DHEA-S normal, 17-hydroxyprogesterone normal, HbA1c 5.1%, fasting glucose 84, normal lipids. No endocrine contributor requiring correction before stimulation.** |
| Recurrent pregnancy loss risk factors | **Not applicable — nulligravid.** |
| Genetic carrier or hereditary risk factors | **The unresolved issue with the greatest downstream consequence. Expanded carrier screening negative across 283 genes. However, her pedigree (mother with breast cancer at 44, maternal aunt with ovarian cancer at 51, maternal grandmother with breast cancer, and her own diagnosis at 32) meets criteria for germline BRCA1/2 and multigene panel testing. Urgent germline testing is already in progress through oncology; a BRCA1 or BRCA2 result would affect her ovarian reserve trajectory, her future risk-reducing salpingo-oophorectomy timing, and her interest in preimplantation genetic testing for a monogenic condition on any future embryos created from these oocytes.** |
| Fertility preservation needs | **Urgent and clearly indicated. Gonadotoxic cyclophosphamide-containing chemotherapy within roughly 3 weeks, plus 5–10 years of subsequent endocrine therapy during which pregnancy is contraindicated — deferring her window to approximately age 39–42. Single, so oocyte cryopreservation. Target 15–20 mature oocytes.** |
| Preconception optimization needs | **Minimal and already addressed — folic acid started, immunizations current, BMI 23.1, non-smoker, negligible alcohol, no chronic disease. Preconception optimisation is genuinely years away and was framed as such to avoid adding to her burden.** |
| Treatment readiness and barriers | **Ready, informed, and decisionally capable — capacity specifically assessed given the compressed timeline. Barriers: the immovable oncology deadline, storage costs beyond the insurance mandate, and severe situational distress (GAD-7 15, PHQ-9 11) requiring support rather than delay. Logistics favourable — she lives 15 minutes away and has flexible employer leave for the monitoring visits.** |

## UM ULTRASOUND / FOLLICLE MONITORING

### 7 BASELINE TRANSVAGINAL ULTRASOUND — PERFORMED TODAY

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| Cycle day and treatment cycle type | **Cycle day 3**; baseline scan before a planned antagonist protocol with a letrozole-supplemented, GnRH-agonist-triggered oocyte cryopreservation cycle for fertility preservation. |
| Uterine size and position | Normal size at 7.6 × 4.3 × 3.9 cm, anteverted, midline, mobile, normal myometrial echotexture. |
| Endometrial thickness and pattern | **4.2 mm**, thin and trilaminar — appropriate for cycle day 3 and confirming a true baseline with no residual luteal effect. |
| Fibroids, polyps, adhesions, anomalies | None visualised. No fibroid, no polyp, no intracavitary lesion, no synechiae, no septum or other congenital anomaly. Cavity appears normal, though formal saline assessment was not performed. |
| Right ovarian follicle count and sizes | Right ovary 3.4 × 2.2 × 2.0 cm, normal position and mobility. **10 antral follicles**, 3–8 mm, evenly distributed. No dominant follicle, no cyst. |
| Left ovarian follicle count and sizes | Left ovary 3.2 × 2.4 × 1.9 cm, normal. **9 antral follicles**, 3–9 mm. No dominant follicle, no cyst. Both ovaries readily accessible transvaginally — relevant to retrieval feasibility and documented as such. |
| Antral follicle count | **Total 19** (right 10, left 9) — normal for age 32 and concordant with an AMH of 3.1 ng/mL. Predicts a good response to stimulation. Not polycystic morphology. |
| Ovarian cysts or endometriomas | None. No simple or complex cyst, no endometrioma, no dermoid, no hydrosalpinx. |
| Free fluid | Trace physiologic fluid in the posterior cul-de-sac, normal. **Recorded as a baseline against which post-retrieval or hyperstimulation-related fluid can be judged.** |
| Ovarian stimulation response | Not yet applicable — treatment-naive, baseline study only. This scan establishes the reference for serial monitoring on stimulation days 5, 7, 9, and as needed thereafter. |
| Comparison to prior ultrasound | No prior pelvic imaging exists — this is her first. Documented so that future comparisons are correctly anchored. |
| Procedure tolerance and limitations | Transvaginal approach, chaperone present, well tolerated with no discomfort beyond mild pressure. Image quality good; both ovaries fully visualised and countable. No technical limitation. Findings and their favourable implications were shown to her on screen, which she reported as the first reassuring news since her diagnosis. |
| Plan based on findings | **Proceed to stimulation today** — a normal baseline with 19 antral follicles, a thin endometrium, no cyst, and accessible ovaries, on cycle day 3, is an ideal starting |

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| | point. Protocol and dosing detailed in the plan. |

## TC TREATMENT CYCLE MONITORING

### 8 FERTILITY TREATMENT CYCLE STATUS — CYCLE 1, DAY 3 (INITIATION)

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| Treatment type | **Fertility preservation — oocyte cryopreservation** (vitrification). No insemination, no fertilisation, no embryo creation, no transfer this cycle. |
| Cycle day and medication protocol | Cycle day 3, initiating today. **GnRH antagonist protocol with letrozole co-administration and a GnRH agonist trigger** — the protocol specifically chosen for hormone-sensitive breast cancer: letrozole suppresses the peak estradiol of stimulation, and an agonist trigger with no luteal support and no hCG minimises hyperstimulation risk and shortens the luteal phase so chemotherapy can begin promptly. |
| Medication doses and adherence | Follitropin (recombinant FSH) 225 IU subcutaneously daily plus menotropins 75 IU daily, starting tonight. **Letrozole 5 mg orally daily** from today through retrieval. GnRH antagonist (ganirelix) 250 mcg daily to begin on stimulation day 5 or when the lead follicle reaches 13–14 mm. Injection teaching completed in clinic today with return demonstration by the patient, plus written instructions, a video link, and a dosing calendar. Adherence not yet assessable — treatment-naive; first injection is tonight. |
| Follicle response | Not yet applicable — baseline only (19 antral follicles). First monitoring scan on stimulation day 5 (08/25). |
| Endometrial development | Baseline 4.2 mm trilaminar. Endometrial development is **clinically irrelevant this cycle** — no transfer is planned, and letrozole will suppress estradiol; noted so that a thin endometrium on monitoring is not misread as a problem. |
| Monitoring labs | Baseline today: estradiol 41 pg/mL, LH 4.8 IU/L, progesterone 0.4 ng/mL. Serial estradiol, LH, and progesterone with each monitoring scan. **Estradiol will be interpreted against letrozole suppression** — expected peak substantially lower than in a standard cycle, and this is the intent, not an inadequate response. |
| Trigger plan | **GnRH agonist trigger (leuprolide 4 mg subcutaneously) — no hCG**, when 2 or more follicles reach 17–18 mm. Chosen to minimise hyperstimulation risk and to avoid a prolonged luteal phase. Retrieval 35–36 hours after trigger. |
| Retrieval timing | Anticipated stimulation day 10–12, so approximately **08/30 to 09/01/2026** — leaving 9–11 days before the 09/10 chemotherapy target. Transvaginal ultrasound-guided retrieval under monitored anaesthesia care. A second cycle is feasible only if the first yield is low and oncology reconfirms the delay; the default is a single cycle. |
| Embryo status | **Not applicable** — oocytes will be vitrified unfertilised. No |

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| | **embryos created, so no embryo disposition or grading applies. Documented explicitly for the consent record.** |
| Luteal support plan | **None — deliberately omitted. No transfer, and progesterone support would delay menses and chemotherapy without benefit. She was counselled to expect menses roughly 10–14 days after retrieval and that chemotherapy need not wait for it.** |
| Side effects and hyperstimulation symptoms | **None yet — treatment-naive. Counselled on expected bloating, breast tenderness, mood change, injection-site reaction, and headache; and on ovarian hyperstimulation warning signs requiring immediate contact: rapid weight gain over 2 lb per day, severe abdominal pain or distension, nausea and vomiting, shortness of breath, reduced urine output, or calf pain. Her risk is low-to-moderate — age 32 with a good antral count, mitigated by the agonist trigger and the absence of hCG or luteal support.** |
| Cycle risks, consent, and instructions | **Risks reviewed in full: hyperstimulation (low with this protocol), retrieval bleeding or infection or organ injury (under 1%), anaesthetic risk, ovarian torsion, thromboembolism (relevant given malignancy), cycle cancellation for poor response, and the central uncertainty that oocyte vitrification does not guarantee a future live birth — realistic per-oocyte and per-cycle expectations for her age were given numerically. She was told clearly that a 1–2 week delay of chemotherapy for this purpose is not associated with worse oncologic outcomes in stage II disease, which was her single greatest fear. Written consents for stimulation, retrieval, vitrification, and long-term storage to be signed before tonight's first injection, including disposition directives in the event of death or incapacity.** |

## PR PROCEDURES PERFORMED

### 9 PROCEDURE DOCUMENTATION

**Procedure, indication, consent, chaperone, guidance**

**Baseline transvaginal ultrasound with antral follicle count**, performed today. Indication: ovarian reserve assessment and confirmation of a suitable baseline before urgent fertility-preservation stimulation. Verbal consent obtained after explanation; chaperone Robin Aldaz, RN present throughout. Transvaginal probe with sterile sheath and gel; no additional guidance modality. Also performed: subcutaneous **injection teaching with return demonstration**, and phlebotomy for baseline hormonal studies.

**Technique, specimens, findings**

Systematic survey of uterus, endometrium, and both adnexa in sagittal and transverse planes, with follicles counted in two planes per ovary to avoid duplication. Findings as documented above: normal uterus, 4.2 mm trilaminar endometrium, right ovary 10 antral follicles, left ovary 9, total 19, no cyst or endometrioma, trace physiologic cul-de-sac fluid, no hydrosalpinx. Specimens: peripheral blood for estradiol, LH, progesterone, and a repeat AMH; urine for hCG (**negative**, obtained before any medication). No tissue specimen. No oocyte retrieval, insemination, or transfer performed today.

**Tolerance, complications, aftercare, follow-up**

Well tolerated; no discomfort beyond mild pressure and no vasovagal response. **No complications.** Findings reviewed with her on screen in real time. Aftercare: begin follitropin 225 IU, menotropins 75 IU, and letrozole 5 mg tonight per the written calendar; rotate injection sites; report injection-site infection, severe headache, visual change, or hyperstimulation warning

signs. Follow-up: monitoring scan and labs on stimulation day 5 (08/25/2026), with the 24-hour on-call number provided and consents to be completed before the first dose.

## ST SCREENING / ASSESSMENT TOOLS

### 10 STANDARDIZED TOOLS & INTERPRETATION

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| PCOS diagnostic criteria review | **Rotterdam criteria assessed and not met — 0 of 3: regular ovulatory cycles, no clinical or biochemical hyperandrogenism (modified Ferriman-Gallwey 2, normal androgens), and no polycystic ovarian morphology (19 total antral follicles is normal). Relevant because PCOS would elevate hyperstimulation risk and alter dosing.** |
| Ovulation tracking logs | **None — never attempted conception. Cycle regularity, mucus change, and premenstrual symptoms serve as clinical surrogates; day-3 gonadotropins and the antral count corroborate normal function.** |
| Menstrual bleeding diary | **Retrospective history: 28–30 day cycles, 4–5 days of moderate flow, mild day-1 dysmenorrhea 3/10. No prospective diary — and none needed, given the timeline.** |
| Fertility quality-of-life assessment | **FertiQoL administered: total 52 of 100, with the emotional subscale lowest at 38 and the mind-body subscale 46. Reflects acute distress from the simultaneous cancer and fertility threat rather than long-standing infertility grief. Baseline recorded for post-treatment comparison.** |
| PHQ-9 | **11 — moderate depressive symptoms, driven by sleep (4–5 hours), appetite, and concentration items. Item 9 = 0, no suicidal ideation. No prior score; no psychiatric history. Onset clearly dates to the 08/09 diagnosis.** |
| GAD-7 | **15 — moderate-to-severe anxiety. Content is entirely specific and reality-based: mortality, treatment, and permanent loss of fertility. Warrants support in parallel with treatment, not delay of it. Oncology psychology referral placed and accepted.** |
| Intimate partner violence screening | **Performed privately — negative. No partner; feels safe at home. Mother is the primary support person.** |
| Genetic carrier screening assessment | **Expanded panel across 283 genes — negative for all carrier states. Separately, germline cancer-predisposition testing (BRCA1/2 and multigene panel) is urgently in progress through oncology given her pedigree and age at diagnosis; result pending and consequential for future preimplantation genetic testing and risk-reducing surgery timing.** |
| Preconception risk assessment | **Low risk apart from the oncologic diagnosis and its treatment. BMI 23.1, non-smoker, negligible alcohol, no chronic disease, immunizations current, folic acid started. Pregnancy is contraindicated for the duration of chemotherapy and endocrine therapy — a point requiring explicit contraceptive counselling.** |
| Medication adherence assessment | **Not yet applicable — treatment-naive. Injection technique** |

| | |
|---|---|
| | **taught with successful return demonstration; comprehension excellent; written calendar and video resources provided. Adherence risk assessed as low.** |
| Social determinants of health screening | **Negative for housing, food, transportation, and utility insecurity. Positive for financial concern regarding long-term storage fees, which the state mandate does not cover — financial counselling arranged.** |

## L LABORATORY AND DIAGNOSTIC RESULTS

### 11 RESULTS REVIEWED OR ORDERED

#### Ovarian Reserve / Reproductive Hormones

**AMH 3.1 ng/mL** (08/15/2026) — normal for age 32, predicting a good stimulation response. **Cycle day 3 (today): FSH 6.4 IU/L, LH 4.8 IU/L, estradiol 41 pg/mL, progesterone 0.4 ng/mL** — a clean, unstimulated baseline confirming no premature luteinisation or residual cyst activity. **Antral follicle count 19** (right 10, left 9). Inhibin B not measured — adds nothing to AMH plus antral count. Cycle-day context documented throughout, without which these values could not be interpreted.

#### Endocrine / Metabolic Labs

TSH 1.4 mIU/L with free T4 1.2 ng/dL — euthyroid. **Prolactin 14 ng/mL — normal**, excluding hyperprolactinemia (checked given the breast diagnosis and to exclude a pituitary cause of any future cycle disturbance). Total testosterone 32 ng/dL and free testosterone 3.1 pg/mL — normal. DHEA-S 178 mcg/dL and 17-hydroxyprogesterone 62 ng/dL — both normal, excluding non-classical adrenal hyperplasia. HbA1c 5.1%, fasting glucose 84 mg/dL, fasting insulin 6.2 µIU/mL — no insulin resistance. Lipid panel normal. Comprehensive metabolic panel normal with creatinine 0.78 and normal liver enzymes (a relevant pre-chemotherapy baseline). Vitamin D 31 ng/mL, sufficient.

#### Pregnancy / Loss Evaluation

**Urine hCG negative today, obtained before any medication** — mandatory before stimulation. Serum hCG not required. No progesterone-based luteal assessment needed. Antiphospholipid antibodies, parental karyotypes, and recurrent-loss laboratories all **not indicated** — nulligravid with no loss history; documented so that their absence is understood as deliberate rather than overlooked.

#### Infectious / Preconception Labs

Required before gamete cryopreservation and storage, all drawn 08/15 and resulted: **HIV non-reactive, hepatitis B surface antigen negative with core antibody negative, hepatitis C antibody negative, syphilis non-reactive.** Gonorrhea and chlamydia negative. Blood type **A negative with a negative antibody screen** — recorded, relevant to any future pregnancy. Rubella IgG immune, varicella IgG immune. CMV IgG negative (non-immune) — documented per tissue-banking requirements. Urine culture negative. All laboratory requirements for cryopreservation are satisfied, so storage will not be delayed on paperwork.

#### Genetic Testing

**Expanded carrier screening (283 genes) — negative** for all carrier states, 08/16/2026. **Germline cancer-predisposition panel (BRCA1, BRCA2, PALB2, TP53, CHEK2, ATM, and associated genes) sent urgently by oncology 08/12 — result pending, expected within 7–10 days.** No karyotype indicated. No PGT performed — no embryos created. If a pathogenic variant is identified, preimplantation genetic testing for a monogenic condition could be applied to embryos generated from these oocytes years hence, and this possibility was explained today so that her consent covers it.

#### Semen Analysis

**Not applicable** — no partner, donor sperm declined, oocyte cryopreservation elected. No urology involvement.

#### Tubal / Uterine Evaluation

No HSG, saline sonogram, hysteroscopy, or laparoscopy — **deliberately deferred.** None is required before oocyte retrieval, and each would consume days that cannot be recovered. Today's transvaginal ultrasound showed a normal

uterus and normal adnexa. Cavity assessment will be undertaken years later, before any embryo transfer.

### Fertility Treatment Records

None — treatment-naive. No prior stimulation protocol, oocyte yield, fertilisation, embryo development, grading, PGT, transfer outcome, or cryopreservation history. This cycle establishes her first response data.

### Prior Records Reviewed

**Oncology records in full** — the 08/09/2026 core biopsy pathology (invasive ductal carcinoma, grade 2, ER 95% positive, PR 80% positive, HER2 negative by immunohistochemistry with a Ki-67 of 22%), staging imaging showing no distant metastasis, the planned neoadjuvant regimen, and **Dr. Vantorre's written authorisation of a chemotherapy delay of up to 2 weeks**. Breast surgery consultation note. Diagnostic mammogram and breast ultrasound reports. Primary care records confirming no chronic disease. Prior Pap and HPV co-test 02/2025 (negative). Immunization record. Insurance benefits verification confirming state fertility-preservation mandate coverage for the cycle.

## A ASSESSMENT

### 12 FERTILITY & REPRODUCTIVE ENDOCRINOLOGY CLINICAL INTERPRETATION

- **Anticipated iatrogenic infertility — urgent fertility preservation indicated.** A 32-year-old nulligravid woman with stage IIA, grade 2, ER-positive, PR-positive, HER2-negative invasive ductal carcinoma of the left breast, due to start cyclophosphamide-containing neoadjuvant chemotherapy in approximately 3 weeks. This is not an infertility diagnosis: it is preservation of normal fertility against a known, quantifiable, treatment-related threat.
- **Not infertile — nulligravid and treatment-naive with normal reproductive function.** Regular ovulatory 28–30 day cycles, normal day-3 gonadotropins, no gynecologic pathology, and no prior conception attempt. This was stated to her plainly, since many patients in her position assume a cancer diagnosis implies infertility.
- **Ovarian reserve is normal for age and prognostically favourable:** AMH 3.1 ng/mL, day-3 FSH 6.4 with estradiol 41, and an antral follicle count of 19. This predicts a good response and materially improves the chance of banking a clinically useful cohort in a single cycle — the most consequential single finding of the visit.
- **Ovulatory function normal;** no endocrine contributor requires correction before stimulation — euthyroid, normoprolactinemic, normoandrogenic, no insulin resistance. **PCOS explicitly excluded** (0 of 3 Rotterdam criteria), which matters because it would have raised hyperstimulation risk in a patient who cannot afford a complication-driven delay.
- **No uterine, tubal, cervical, pelvic, endometriosis, or male factor issues.** Tubal and cavity assessment was deliberately deferred as irrelevant to retrieval and costly in time. Male factor is not applicable — she is single, and after a full discussion of the trade-offs she declined donor sperm in favour of **oocyte rather than embryo cryopreservation**, preserving future partner choice and avoiding embryo-disposition complexity.
- **The window is the binding constraint, and it is adequate.** Chemotherapy targeted for 09/10 with a written 2-week delay authorised; she presents on cycle day 3 with a clean baseline, permitting immediate start. Anticipated retrieval 08/30–09/01, leaving 9–11 days of margin. She was counselled — and this addressed her principal fear — that a 1–2 week delay for preservation in stage II disease is not associated with worse oncologic outcomes.
- **Hormone-sensitive disease dictates the protocol.** ER 95% positive means the supraphysiologic estradiol of conventional stimulation is undesirable, so a **letrozole-supplemented antagonist protocol with a GnRH agonist trigger, no hcg, and no luteal support** is indicated — suppressing peak estradiol, minimising hyperstimulation risk, and shortening the luteal phase so chemotherapy is not delayed by an ovarian complication.
- **The reproductive window is deferred well beyond chemotherapy.** ER-positive disease will require 5–10 years of adjuvant endocrine therapy during which pregnancy is contraindicated, putting any attempt at roughly age 39–42 even with full ovarian recovery. **Preservation therefore has value independent of chemotherapy-induced ovarian insufficiency**, since age-related decline over that interval is itself substantial — a point often missed and one she had not been told.

- **Hereditary cancer risk is the significant unresolved variable.** Breast cancer in her mother at 44, ovarian cancer in a maternal aunt at 51, breast cancer in her maternal grandmother, and her own diagnosis at 32 meet criteria for germline testing, which is in progress. A BRCA1 or BRCA2 result would carry implications for future risk-reducing salpingo-oophorectomy timing (constraining her window further), for preimplantation genetic testing on embryos later created from these oocytes, and for cascade testing in her family. Her consent today was framed to accommodate that possibility.
- **Severe situational psychological distress** — GAD-7 15, PHQ-9 11, FertiQoL emotional subscale 38 — entirely proportionate to a cancer diagnosis and a fertility threat arriving within 11 days. No suicidal ideation, no prior psychiatric history. **Decisional capacity specifically assessed and intact**, which required documenting given the compressed timeline and emotional load. This warrants concurrent support, not delay.
- **Realistic expectations were set numerically rather than vaguely:** an expected yield of 12–18 mature oocytes given her reserve, with roughly 90–95% surviving vitrification and thaw, and a meaningful but not guaranteed cumulative live-birth probability from a cohort of that size at her age. She understands that vitrification is not insurance and that spontaneous fertility may well be preserved regardless.
- **No contraindication to proceeding and no red flags.** Normal examination, no cyst or mass, accessible ovaries, no thromboembolic signs, all infectious and preconception laboratories complete so storage will not be held up on paperwork, insurance verified under the state mandate. Recommendation: **begin stimulation tonight.**

## P PLAN

### 13 MANAGEMENT BY PROBLEM

- **Fertility preservation — oocyte cryopreservation, starting tonight.** Letrozole-supplemented GnRH antagonist protocol: follitropin 225 IU plus menotropins 75 IU subcutaneously nightly, with **letrozole 5 mg daily** from today through retrieval to suppress peak estradiol in ER-positive disease. Ganirelix 250 mcg daily from stimulation day 5 or when the lead follicle reaches 13–14 mm. **GnRH agonist trigger (leuprolide 4 mg) with no hCG** when two or more follicles reach 17–18 mm, retrieval 35–36 hours later, anticipated 08/30–09/01. Vitrification of all mature oocytes. **No luteal support** — deliberately, to avoid delaying menses and chemotherapy. Injection teaching completed today with return demonstration, written calendar, and video resources. All consents (stimulation, retrieval, vitrification, long-term storage, and disposition directives in the event of death or incapacity) to be executed before tonight's first dose.
- **Monitoring schedule — built around the oncology deadline.** Transvaginal ultrasound with estradiol, LH, and progesterone on stimulation day 5 (08/25), day 7 (08/27), day 9 (08/29), and daily thereafter as indicated. Estradiol to be interpreted against letrozole suppression — a lower peak is the intent, not an inadequate response, and she was told this explicitly so a "low" number does not alarm her. Early-morning appointments arranged around her work. Dose adjustments by protocol on response. **Cycle cancellation thresholds discussed:** poor response, premature luteinisation, or a hyperstimulation risk that would jeopardise the chemotherapy start.
- **Ovarian hyperstimulation prevention and vigilance.** Risk is low-to-moderate (age 32, antral count 19) and further reduced by the agonist trigger, the absence of hCG, and no luteal support. Written warning signs given: **weight gain exceeding 2 lb per day, severe abdominal pain or distension, persistent nausea or vomiting, shortness of breath, reduced urine output, or calf pain — each requiring immediate contact via the 24-hour line.** Baseline abdominal examination and cul-de-sac fluid documented today for comparison. Daily weights during stimulation and for 7 days after retrieval, with a written log.
- **Oncologic coordination — the deadline governs everything.** Dr. Vantorre's written authorisation of a delay of up to 2 weeks is on file, and the anticipated retrieval date leaves 9–11 days of margin. **Direct communication established with oncology today, with a commitment to notify them within 24 hours of retrieval so chemotherapy can be scheduled without further slippage.** Breast surgery and the multidisciplinary tumour board informed. If a complication threatens the timeline, **oncologic treatment takes precedence and the cycle will be abandoned** — stated plainly to her, and she agreed.

- **Second cycle — conditional, not assumed.** A second stimulation would be considered only if the first yield falls materially short of the 15–20 target **and** oncology reconfirms that a further delay is acceptable. The default and expectation is a single cycle. Framed carefully so she does not bank hope on a second attempt that the oncologic timeline is unlikely to permit.
- **Ovarian suppression during chemotherapy — a distinct, additive measure.** GnRH agonist (monthly leuprolide depot) during chemotherapy discussed as a possible means of reducing the risk of chemotherapy-induced ovarian insufficiency, and as beneficial for menstrual suppression during myelosuppression. Explicitly framed as **adjunctive and of uncertain fertility benefit — not a substitute for cryopreservation.** Decision and prescribing referred to oncology, with our written recommendation to consider it, and it can begin after retrieval.
- **Germline genetic testing — actively pursued.** BRCA1/2 and multigene panel in progress through oncology; result expected within 7–10 days. Genetic counselling referral placed and accepted. Implications explained: a pathogenic variant would affect risk-reducing salpingo-oophorectomy timing (further constraining her reproductive window and arguing for using the cryopreserved oocytes sooner), would permit preimplantation genetic testing for a monogenic condition on future embryos, and would prompt cascade testing for her mother, aunt's family, and any children. **Notably, testing does not need to be resolved before starting stimulation**, and we are not waiting on it.
- **Contraception — addressed rather than assumed.** Pregnancy is contraindicated throughout chemotherapy and the 5–10 years of endocrine therapy. Combined hormonal contraception is unsuitable in ER-positive disease. Non-hormonal options counselled: condoms, and a copper IUD as the most effective non-hormonal method, which can be placed after chemotherapy. Interim: barrier method, and she is not currently sexually active. Documented because it is frequently and consequentially overlooked in this population.
- **Psychological support — concurrent, not sequential.** Oncology psychology referral placed and accepted for GAD-7 15 and PHQ-9 11, with the distress explicitly validated as proportionate rather than pathologised. Young-adult cancer peer support and an oncofertility patient network provided. Decisional capacity assessed and documented as intact. Sleep hygiene discussed; lorazepam PRN from oncology continued for procedural anxiety. FertiQoL to be repeated after retrieval.
- **Financial and logistical navigation.** Insurance verified — state fertility-preservation mandate covers most of the cycle for iatrogenic infertility. **Long-term storage fees are not covered** and are her stated financial worry: financial counselling arranged, and oncofertility grant programmes (LIVESTRONG and comparable foundations) applied for today. Medication assistance and manufacturer discount programmes for gonadotropins pursued. Storage contract terms, annual fees, and renewal obligations to be reviewed at consent signing rather than glossed over.
- **Long-term reproductive planning — framed honestly.** After chemotherapy: assess ovarian function at 6–12 months with AMH, FSH, and cycle history; spontaneous fertility may well recover at 32 and the cryopreserved oocytes may never be needed — the ideal outcome. Any future use requires thaw, ICSI fertilisation with partner or donor sperm, and transfer, with uterine cavity assessment (saline sonogram or hysteroscopy) undertaken at that time. Pregnancy after ER-positive breast cancer requires oncologic clearance, typically after a defined interval of endocrine therapy, and interruption of endocrine therapy for pregnancy is an established and studied option to raise with oncology at the appropriate time. Gestational carrier and adoption mentioned as alternative routes so the picture is complete.
- **Patient education and safety.** All fourteen of her written questions answered. Explained: what chemotherapy does to the ovarian reserve; why letrozole is used in hormone-sensitive disease; why oocytes rather than embryos suit her situation; realistic numerical expectations for yield, thaw survival, and live birth; and why a 1–2 week delay does not compromise her cancer outcome. Written summary, medication calendar, hyperstimulation warning card, and the 24-hour on-call number provided; teach-back confirmed on injection technique and on warning signs. **Instructed to seek emergency care for severe abdominal pain, shortness of breath, calf pain or unilateral leg swelling, syncope, or fever above 100.4 °F**, and to call the clinic for injection difficulty, missed doses, rapid weight gain, or any question at all — with the explicit reassurance that no question is too small during a compressed cycle.

## F FOLLOW-UP

### 14 REASSESSMENT PLAN

**Follow-up**

**Monitoring visit stimulation day 5 (08/25/2026)** — transvaginal ultrasound with follicle measurement, estradiol, LH, and progesterone; then day 7 (08/27), day 9 (08/29), and daily as indicated until trigger criteria are met. Trigger anticipated 08/29–08/31 with **retrieval 08/30–09/01/2026**. Vitrification count and maturity reported to her within 24 hours of retrieval, with oncology notified the same day so chemotherapy can be scheduled. Post-retrieval check at 48–72 hours (or sooner for any hyperstimulation symptom) with daily weights for 7 days. Germline genetic result and genetic counselling appointment within 7–10 days. Ovarian suppression decision with oncology before the first chemotherapy cycle. Repeat FertiQoL and psychological reassessment after retrieval. **Long-term: ovarian function reassessment (AMH, FSH, cycle history) at 6–12 months after chemotherapy completion**, with REI follow-up thereafter as she and oncology plan her reproductive timeline. Immediate contact via the 24-hour line for hyperstimulation warning signs, and emergency care for severe abdominal pain, dyspnea, calf pain, syncope, or fever.

## TB TIME DOCUMENTATION & BILLING

**TOTAL TIME SPENT**

96 minutes

**FERTILITY COUNSELING TIME**

38 minutes — gonadotoxicity, preservation options, oocyte versus embryo, realistic outcome expectations

**MEDICATION / INJECTION TEACHING TIME**

16 minutes — subcutaneous technique with return demonstration, calendar, warning signs

**TREATMENT CYCLE COUNSELING TIME**

14 minutes — protocol rationale, letrozole in ER-positive disease, agonist trigger, cancellation thresholds, consents

**GENETIC COUNSELING COORDINATION TIME**

7 minutes — pedigree review, germline testing implications, referral

**CARE COORDINATION TIME**

12 minutes — oncology, breast surgery, financial counselling, insurance mandate verification

**RECORDS REVIEW TIME**

9 minutes — oncology pathology and staging, delay authorisation, prior gynecologic records

**PROCEDURE TIME**

13 minutes — baseline transvaginal ultrasound with antral follicle count

**E/M LEVEL**

99205 — new patient, high-complexity medical decision making (96 minutes total time on the date of service)

**ULTRASOUND / FOLLICLE MONITORING CODE(S)**

76830 — transvaginal ultrasound, non-obstetric (modifier 25 on the E/M). Planned serial 76857 limited pelvic ultrasound for follicle monitoring

**PROCEDURE CODE(S)**

Planned: 58970 — follicle puncture for oocyte retrieval, any method; 89337 — cryopreservation of mature oocytes; 89346 — storage, oocytes (per year)

**FERTILITY TREATMENT CYCLE CODE(S)**

Controlled ovarian hyperstimulation cycle for fertility preservation — billed under the state fertility-preservation mandate for iatrogenic infertility

**GENETIC COUNSELING / CARE COORDINATION CODE(S)**

Germline testing and counselling billed through oncology and genetics; coordination bundled in time-based E/M here

**BASIS FOR BILLING**

Time-based and high-complexity MDM (urgent oncofertility decision-making under an immovable treatment deadline) plus separately identifiable diagnostic ultrasound

**PRIMARY DIAGNOSIS**

Z31.84 — Encounter for fertility preservation procedure

**SECONDARY DIAGNOSES**

C50.412 Malignant neoplasm of upper-outer quadrant of left female breast; Z17.0 Estrogen receptor positive status; Z80.3 Family history of malignant neoplasm of breast; Z80.41 Family history of malignant neoplasm of ovary; Z31.62 Encounter for fertility preservation counseling; N97.9 Female infertility, unspecified (anticipated iatrogenic); F43.22 Adjustment disorder with anxiety; Z79.899 Other long-term drug therapy (pending chemotherapy)

SO

## PROVIDER SIGN-OFF

| PROVIDER NAME | CREDENTIALS | SPECIALTY | DATE | TIME |
|---|---|---|---|---|
| Colette M. Iwuchukwu, MD | MD — Reproductive Endocrinology & Infertility | Reproductive Endocrinology & Infertility | 08/20/2026 | 11:14 |

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