

2027-03-22 · 80 minutes

Wk10 Exit ticket: Hormone therapy bioethics debate

Your goal: Argue whether minors should access growth-hormone or hormone therapies based on medical and ethical criteria.

One product: One-sentence written position on minor hormone-therapy consent, citing one medical fact and naming one genuine tradeoff.

Question: Who should decide a minor's hormone treatment, and what evidence and tradeoff should guide that decision?

Start the work

Use the graph for its measured conditions and independent receptor evidence for a bounded drug prediction.

1. Complete the poll, two warmups and T1 sorting. Read E1-E3 and S1 to distinguish medical facts from preferences.
2. Prepare the assigned physician, parent, patient or insurer role with two possible benefits and two risks.
3. Exchange arguments during cross-talk, or use the supplied solo practice. Respond to an opposing consent argument without inventing peer comments.
4. Write the one-sentence exit with your position, a medical fact and a genuine tradeoff.
5. Share and submit the same response, or save it and tell the teacher if access fails. Check Schoology after uploading.

If the assignment is unavailable, save the same sentence and tell the teacher. Use the supplied practice for the written argument; follow any separately assigned group, recording and official tasks with their actual materials.

Words you will use

hormone

A chemical messenger that changes activity in cells with a matching receptor.

endocrine gland

A group of cells or organ that releases hormones into blood.

receptor

A cell protein that receives a matching signal.

metabolism

The chemical processes by which the body uses and changes materials and energy.

growth hormone

A hormone involved in growth and metabolism.

somatropin

Manufactured human growth hormone used as a medicine.

IGF-1

Insulin-like growth factor 1, a signal involved in growth-hormone effects.

growth plate

A region near a growing bone's end where length can increase.

growth-hormone deficiency

A condition in which the body does not make enough growth hormone.

idiopathic short stature

Short stature for which no cause has been identified after assessment.

indication

A condition or use for which a treatment is listed.

medical necessity

Whether care is appropriate to a health need, based on evidence and the person's situation.

enhancement

An attempt to increase a trait beyond addressing an identified medical need.

benefit

A desired effect; a possible benefit is not a promise.

risk

The possibility of harm; mentioning a risk does not give its probability.

insulin sensitivity

How strongly tissues respond to insulin.

blood glucose

Sugar carried in the blood.

intracranial pressure

Pressure inside the skull.

stakeholder

Someone affected by a decision or involved in it.

physician

A medical doctor.

insurer

An organization that provides coverage under an insurance plan.

autonomy

Having a voice and agency in choices about one's life.

parental authority

A parent's role in making decisions for a child, subject to ethical and legal limits.

assent

A young person's informed agreement to proposed care.

consent

Permission for an action after relevant information; legal authority depends on context.

capacity

Ability to understand and weigh the choice at hand.

tradeoff

A choice involving a gain and a competing burden or risk.

claim

A position that can be supported with reasons and evidence.

counterclaim

An opposing claim that deserves a response.

rebuttal

A response explaining why an opposing claim does or does not change the position.

criterion

A standard used to judge a choice.

provisional

Awaiting confirmation.

homeostasis

Keeping internal conditions within workable ranges.

feedback loop

A process whose results affect the signals controlling it.

insulin

A pancreatic hormone that helps lower blood glucose.

glucagon

A pancreatic hormone that helps raise blood glucose.

E1: hormones carry signals

MedlinePlus explains that hormones are chemical messengers. Endocrine glands make them, and blood carries them to tissues and organs. They affect growth, energy use and reproduction. Too much or too little of a hormone can cause problems.

A signal can reach cells far from its source. The cells need the matching receptor to respond to that signal. E2 gives one growth-hormone example. Hormone therapies are not all the same: their effects depend on the hormone, reason for use and person.

For the warmup, name one process from E1 and one stakeholder besides the fictional young person. The physician, parent and insurer are supplied options. Do not share your own treatment, body measurements or family decisions.

E2: growth-hormone evidence and limits

The HUMATROPE label identifies somatropin as manufactured human growth hormone. It binds to receptors and starts cell signals, including signals that increase IGF-1. This pathway can affect growth plates in bones.

The label includes growth-hormone deficiency and certain cases of idiopathic short stature among its uses. Short stature alone does not establish eligibility, individual need or benefit. Absence of a known disease does not by itself rule out every labeled use.

Two possible benefits to examine are faster growth during treatment and greater final height in selected patients. These are related endpoints, not two independent guarantees. The label reports studies of selected children; it cannot predict either benefit for S1.

Two medical risks are reduced insulin sensitivity, which can affect blood glucose, and reported raised pressure inside the skull. The label does not give this fictional child's risk. It does not establish a better social life, a promised number of inches or a current price.

E3: voice, permission and clinical judgment

AMA ethics guidance calls for shared decisions involving the child, parent or guardian and physician. It gives more weight to seeking assent as the young person better understands the choice. It also calls for evidence-based care and help with ongoing disagreement.

Assent means the young person agrees after an explanation they can understand. It is not automatically the same as legal consent. Parents have a protective role; the young person's wishes and the clinician's judgment matter too. The insurer makes coverage decisions, which do not alone settle medical need.

Use these ethical ideas to propose who should decide. This is not a statement of the law for a particular treatment, place or age. A label lists uses; it does not decide who has legal consent authority.

S1: original fictional short-stature case

A fictional panel considers a 12-year-old described in the prompt as healthy and short. The prompt gives a projected adult height of 4 feet 10 inches. Treat that projection as an invented premise, not an observed measurement or a diagnosis.

The parents request growth hormone. The insurer has declined coverage, but no reason or price is supplied. The young person has not yet been asked. No growth chart, tests, growth-plate assessment, full history or specialist conclusion is provided. Do not fill those gaps with invented findings.

Poll choices: the young person, parent, physician, insurer or a shared process. Choose an initial view and one reason. Then use E2 to weigh two possible benefits against two medical risks. State that their relevance to this case still needs assessment.

The decision today concerns a fair consent process. You can support access with conditions, oppose the proposed access, or defer while missing evidence is obtained. No option authorizes treatment. Do not assume height determines worth or that being taller improves well-being.

T1: three sorting examples with a check

Sort these original examples by their stated purpose. A: replacing a confirmed growth-hormone deficiency to address growth failure. B: seeking extra muscle for sport when no medical need has been identified. C: a short child with no known cause whose clinician is assessing a possible labeled indication.

Check: A treats an identified deficiency; B states an enhancement goal; C needs more assessment and cannot be classified from height alone. The disease-versus-enhancement split is a first question, not a complete rule for medical necessity. Give the reason for each sort.

Medical necessity asks whether care is appropriate to a health need based on evidence and the person's situation. It is not defined here by preference alone or by a universal insurance rule. Neither a parent's request nor a short height settles it.

R1: four role cards and cross-talk

Physician role: ask whether the evidence supports this use, which benefits are plausible, and which risks require review. Parent role: ask how the choice serves the child and how uncertainty and practical burdens would be handled.

Patient role: ask for an understandable explanation, a chance to speak and respect for concerns.

Insurer role: ask what evidence and coverage criteria support payment and how access can be fair.

These are original role prompts, not records of real views.

From your assigned role, list E2's two possible benefits and two medical risks. Say which tradeoff matters most and why. Offer one claim; hear an opposing claim and answer it using a named card.

If no group is available, label this R1 solo cross-talk. A parent argues that possible growth gains justify access. A physician replies that missing assessment and medical risks require caution. A patient asks why their view is absent. Choose an opposing claim, record its source as supplied practice, and write your reply. Ask the teacher how to join any required group activity.

C1: both sides, recovery and harder case

The group async task asks whether a minor should consent to hormone therapy without parental approval. Record two arguments per side. Build each argument from one R1 role and one E1 or E2 fact, and name whose interest it protects. These are arguments to test, not facts establishing legal rights.

Use the actual group when available. If the group is unavailable, build the four arguments yourself as labeled solo preparation and ask how to join the group activity. Do not invent classmates' words.

For absence recovery, obtain and watch the actual teacher-provided debate recording. Then write four parts: stakeholders, possible benefits, risks/tradeoffs, and a position with the strongest single fact. If the recording is missing, apply the same frame to R1 as practice and ask for the assigned recording.

Extension: an invented mature 16-year-old requests an unspecified hormone therapy that parents oppose. Explain when, if ever, their autonomy should outweigh parental authority. Name a medical criterion that could change your answer, such as evidence of serious harm from delaying needed care. The therapy, diagnosis and urgency are unknown; no actual right or treatment is established.

Self-check: why might a physician decline a parent's request to make a healthy child taller? Method: weigh the E2 benefits against the E2 risks, then name what S1 is missing before any decision. Do not claim every short child without a diagnosed disease is ineligible.

P1: one sentence and authentic holds

Write one sentence taking a position on minor hormone-therapy consent, citing one medical fact and naming one genuine tradeoff. Use a fact from E1 or E2; an ethical preference alone is not the medical fact. The role notes and discussion prepare this exit ticket; no full CER essay is required.

Submit Wk10 Exit ticket: Hormone therapy bioethics debate through the confirmed route. Section 1292 uses assignment 8544580805; section 6792 uses 8544580819. If access is unavailable, save the same sentence and tell the teacher. Check Schoology after uploading.

Today's official work opens Lesson 2.2 with the Activity 2.2.1 The Endocrine System introduction; add a screenshot or note of actual completion to the weekly tracker. Confirm the assigned screens and stopping point before marking completion. This original exit ticket does not finish unseen official work.

March 22 is Monday. Today's task is the hormone-consent debate; follow the teacher's direction if a different bioethics topic is assigned.

The weekend item is Submit reflex evidence in Exit Tickets, with no duration supplied. No homework is due before this class. March 23 needs the actual gland activity; March 24 needs the assigned feedback-model cards, diagram and recording sheet.

Week 10 retains the feedback-loop organizer and evidence through Activity 2.2.1. The teacher-posted absence data/model packet, blood-glucose model and CER, and later experimental-design work remain separate. Obtain those actual inputs; this ethics case supplies none of their model results.

Restart with your role, two benefits, two risks and one opposing claim. End with the one-sentence exit ticket and share it or read it aloud privately. Ask for any missing group directions, recording or official task, and check Schoology after uploading.

M1: different worked model, an optional garden redesign

An invented youth garden council considers replacing a shaded rest area with more planting beds. More growing space is a possible benefit, but losing shade is a burden. The students who use the space have not yet been asked.

Model sentence: I favor asking the students first, because removing a shaded rest area trades more growing space against a place to cool down.

This shows one position, one supplied fact and one tradeoff in one sentence. It supplies no hormone evidence or medical consent rule. Build your own sentence from E1/E2 and S1.

Try the decision

Which next step best fits S1 and the evidence?

- Seek the child's view and missing assessment, then weigh benefit, risk and consent roles before deciding.
- Approve because the parents request greater height; that alone establishes need.
- Deny every short child without a diagnosed disease because no labeled use can exist.

Explain your choice using the reading. Discuss it or say it to yourself. This practice does not add another submission.

Your 80-minute flow

0–8 minutes	Poll, both warmups and T1 sorting.
8–20 minutes	Read E1-E3 and S1; distinguish medical facts from preferences.
20–38 minutes	Prepare the assigned role with two possible benefits and two risks.
38–58 minutes	Cross-talk and async consent arguments; label solo recovery if needed.
58–72 minutes	Write the one-sentence exit with a medical fact and genuine tradeoff.
72–80 minutes	Share and submit your work, or save it and tell the teacher if access fails. Check Schoology after uploading.

Your response record

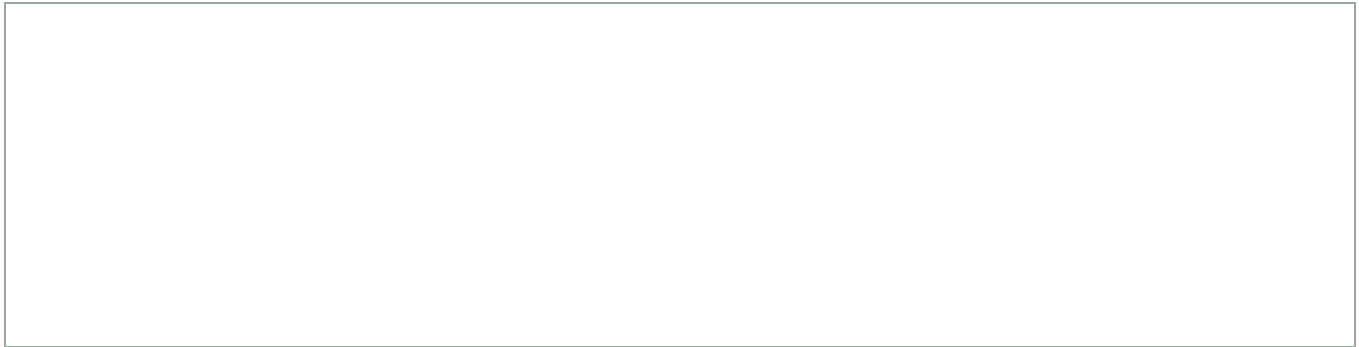
Use these labels on paper or in your document. The space below also works when this page is printed.

Poll, warmups and sorting

Name one hormone-controlled process and another stakeholder for the fictional child; choose a poll option and sort T1 A, B and C with reasons.

Use E1 and T1. No personal treatment or family disclosure is needed.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

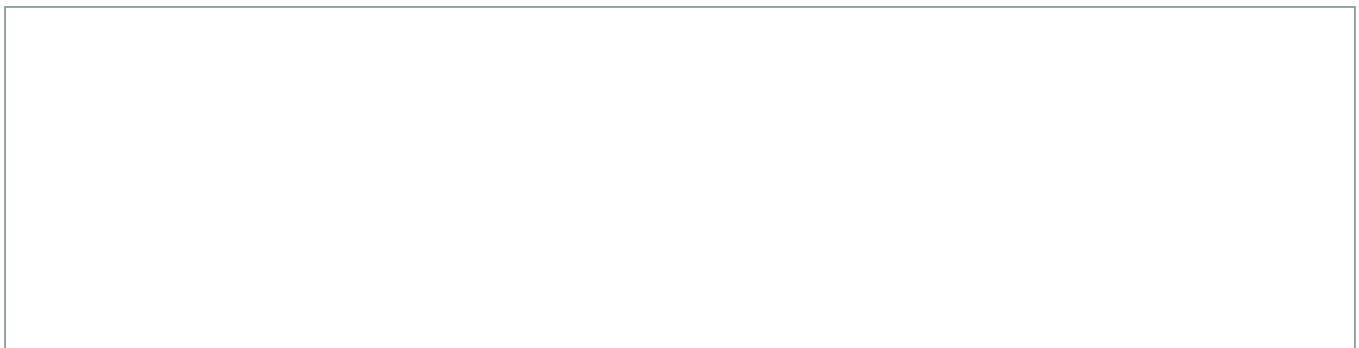


Two benefits and two risks

Name your role and list two possible benefits and two medical risks from E2; explain the tradeoff that matters to your role.

Use all four R1 roles to consider whose interests differ; do not claim S1 will gain a set height.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

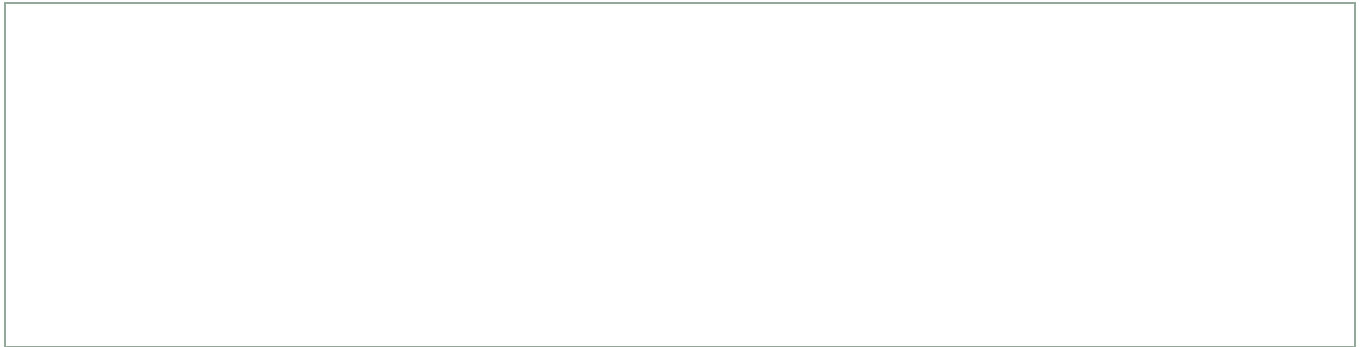


Opposing claim and both consent sides

Record one opposing claim and your reply; for the group async question, record two arguments for and two against consent without parental approval.

Work with your assigned group, or label R1/C1 as solo preparation and ask how to take part in the group work.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

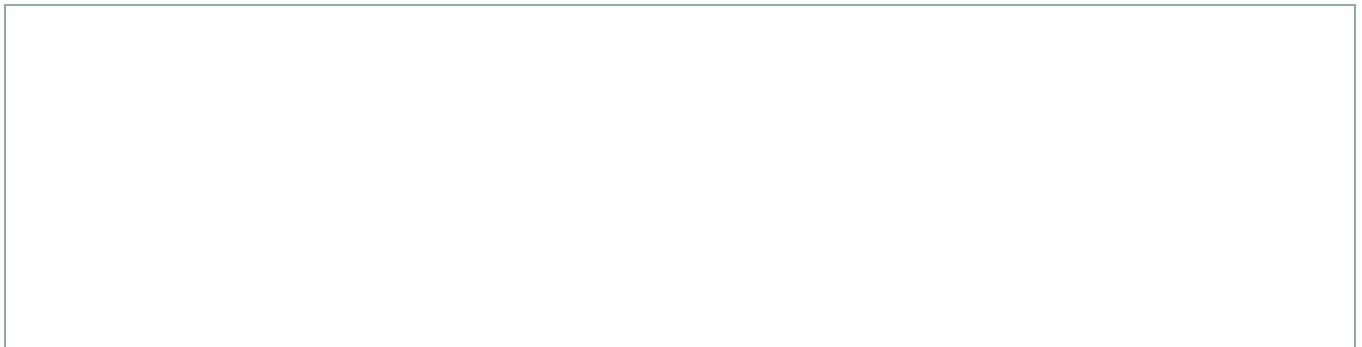


Recovery, self-check and extension

If recovering, use the assigned recording for the four-part frame. If it is unavailable, use R1 practice and ask for the recording; answer the parent-request self-check.

C1 supplies all four parts and the check method. If ready, address the mature-16 extension with one medical criterion; do not infer a diagnosis or law.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



One-sentence exit ticket

Write one sentence on minor hormone-therapy consent with one medical fact and one genuine tradeoff.

Use E1 or E2 for the fact and M1 only for structure. Conditions, deferral and different ethical positions are acceptable with support.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

Share and submit

Share the sentence, submit through the confirmed route and record outstanding group, recording and official steps.

Save the same sentence if access is missing. Attach a screenshot or note of actual official completion to the weekly tracker only when completed.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

Check your product

- The exit ticket is one sentence with a clear consent position, one medical fact and a genuine tradeoff.
- Role notes include two possible benefits and two medical risks, with uncertainty for S1.
- One opposing claim receives a reply; the async notes include two arguments on each side.
- Actual group and recording use are distinguished from supplied solo practice.
- Ask the teacher for missing assessment or official-task materials. After uploading, check that Schoology shows Submitted.

Keep the limit: Original ethics practice only. It cannot establish a patient diagnosis, individual outcome, dose, current price, treatment instruction, legal consent ruling or official completion.

Turn in your work

Submit the one-sentence exit ticket through the teacher-confirmed route for your section under the exact assignment title. Keep role and debate notes as preparation. Section 1292:

<https://clevelandmetro.schoology.com/assignment/8544580805>. Section 6792:

<https://clevelandmetro.schoology.com/assignment/8544580819>. Confirm that your section's assignment is open.

If the assignment is unavailable, save the same sentence and tell the teacher. Use the supplied practice for the written argument; follow any separately assigned group, recording and official tasks with their actual materials.

[Section 1292: Wk10 Exit ticket: Hormone therapy bioethics debate](#)

[Section 6792: Wk10 Exit ticket: Hormone therapy bioethics debate](#)

Carry forward

Weigh medical evidence, the young person's voice and real tradeoffs before defending a treatment policy.

March 23 studies endocrine glands and signals carried through blood; March 24 uses the assigned blood-glucose feedback model. How does a hormone reach a target that can respond to its signal?

Sources and resources

[Open today's page](#)

MED-HORMONES · Hormones

MedlinePlus, National Library of Medicine; updated June 28, 2025

<https://medlineplus.gov/hormones.html>

HUMATROPE-LABEL · HUMATROPE somatropin prescribing information, sections 1.1, 5.4, 5.5, 12.1 and 14.3

Eli Lilly and Company, official labeling hosted by DailyMed

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a774e1ae-3997-49ee-8b0e-99a2b315d409>

AMA-PEDIATRIC · Pediatric Decision Making, Opinion 2.2.1

American Medical Association Code of Medical Ethics

<https://code-medical-ethics.ama-assn.org/ethics-opinions/pediatric-decision-making>