



FAQ: ABGC's Use of AI-Assisted Exam Question Development Why is ABGC using artificial intelligence (AI) in exam development?

ABGC is committed to maintaining a high-quality, valid, fair, and secure certification examination while also supporting the significant efforts of our volunteer item writers and reviewers. To help achieve these goals, ABGC is implementing the use of an AI-assisted item writing tool, Generate, through our examination vendor, **Prometric**.

Generate is intended to support the development and maintenance of exam questions by helping item writers develop initial drafts, identify opportunities for refinement, and improve the efficiency of exam development. This technology serves as a tool to assist subject matter experts—not replace them.

1. What role does AI play in the exam development process?

Generate may be used to:

- Assist with generating item content for item writers
- Improve clarity and consistency of question wording
- Ensuring items are appropriately referenced
- Increase efficiency in examination development workflows

Generate serves as a starting point and support tool. Final decisions regarding question content, accuracy, relevance, and quality always rest with ABGC subject matter experts (SME), including item writers and the Certification Exam Committee.

2. Does AI replace ABGC item writers or reviewers?

No. ABGC relies on the expertise of certified genetic counselors and volunteer subject matter experts to ensure that examination content reflects current standards of practice and accurately assesses the competencies required for certification.

AI is intended to support the work of volunteers, allowing them to focus more of their time on reviewing, refining, validating, and improving examination content.

3. How does ABGC ensure the quality of AI-assisted exam questions?

Every question developed with Generate undergoes the same rigorous review processes as traditionally developed questions.

These processes include:

- Authored by trained item writers
- Evaluated by item writers, Prometric, and the Certification Exam Committee
- Alignment with the CGC Examination Content Outline
- Psychometric review and analysis
- Ongoing monitoring of examination performance and fairness

4. Is ABGC examination content used to train external AI models?

No. Generate is a secure, closed-source platform used within the item development environment. ABGC exam content remains protected and is not used to train publicly available or external AI models.

Protecting ABGC's examination security and confidentiality remains a top priority.

5. How does ABGC address concerns about bias in AI-generated content?

ABGC recognizes that AI technologies may introduce or amplify bias if not carefully managed.

To address this risk:

- Genetic Counselors serve as subject matter experts to review all item content.
- Questions are evaluated for fairness and relevance.
- Examination content must align with the current CGC exam content outline.
- Psychometric analyses are used to identify potential issues in question performance.
- AI-generated content is never accepted without expert review and revision.

ABGC's goal is to ensure that all examination content reflects principles of fairness, validity, and inclusiveness.

6. What evidence supports the use of AI in assessment development?

Emerging research suggests that AI-generated assessment questions can perform similarly to human-authored questions when subjected to rigorous review and quality assurance processes.

At the same time, researchers have identified important limitations related to validity, bias, transparency, and content quality. These findings reinforce the need for expert oversight and

support ABGC's approach of using AI as an assistive tool rather than relying on it independently.

Alani et al. (2026). Can large language models generate exam questions comparable to humans? A systematic review and meta-analysis study in medical education. *Medical Teacher*, 21.

Crk, I., & Gultepe, E. (2026). Evaluating the instrumental quality of LLM-generated assessment items. *Frontiers in Education*, 11.

Kurdi, G., et al. (2020). A Systematic Review of Automatic Question Generation for Educational Purposes. *International Journal of Artificial Intelligence in Education*, 30.

Isley, C., et al. (2026). Assessing the Quality of AI-Generated Exams: A Large-Scale Field Study. *Proceedings of AAAI*, 40.

7. Will AI affect the difficulty or fairness of the CGC examination?

No. CGC exam questions will continue to undergo the same review, validation, and psychometric evaluation processes used before implementation of AI-assisted item development.

The integrity of the certification examination remains paramount.

8. How does this align with the genetic counseling profession's views on AI?

ABGC's approach is consistent with the National Society of Genetic Counselors (NSGC) Position Statement, "*The Use of Artificial Intelligence in Genetic Counseling*" (adopted April 29, 2026).

Like NSGC, ABGC recognizes that AI has the potential to enhance professional activities when it is implemented responsibly, validated appropriately, and used to complement—rather than replace—human expertise and professional judgment.

9. What principles guide ABGC's use of AI?

ABGC is guided by the following principles:

- Certified Genetic Counselor subject matter experts maintain responsibility for, and oversight of, all examination content.
- AI-generated content is reviewed, edited, and validated by item writers and the Certification Exam Committee.
- Examination questions are never authored solely by AI systems.
- Examination validity, fairness, security, and psychometric quality remain paramount.
- Processes are designed to minimize bias and maintain alignment with current standards of genetic counseling practice.
- The certification examination must continue to protect the public by accurately assessing professional competence.

10. Will ABGC continue evaluating the use of AI?

Yes. ABGC will continue to monitor developments in AI technology and evaluate the effectiveness, security, fairness, and appropriateness of AI-assisted item writing tools. Any use of AI in examination development will remain guided by ABGC's commitment to a valid, reliable, secure, and fair certification process.

If you have any questions or concerns, please contact ABCG at info@abgc.net.