

Advance health and life sciences discoveries

Speed research, improve screening, and streamline workflows to help improve patient outcomes

Today's advancements in medical research, precision medicine, and personalized care have the potential to improve patient outcomes and save lives all over the world—but the healthcare and life sciences industries are also dealing with continuing economic uncertainties and an increasingly complex regulatory environment. Researchers and clinicians on the bleeding edge of medicine need modern, high-performing infrastructure to deploy artificial intelligence (AI) and other cutting-edge technologies, fueling the medical discoveries of tomorrow.



Accelerate scientific research and discoveries

Up to 3x higher NAMD performance¹

5th Gen Intel® Xeon® processors

vs. 3rd Generation

The faster biomedical engineers can run molecular dynamics simulations, the sooner they can translate research to action to improve patient outcomes. By equipping your computing solutions with the new Intel Xeon processors, you'll be getting up to 3x higher nanoscale molecular dynamics (NAMD) performance compared to processors from two generations ago.



Advance precision medicine research

Up to 3.5x more genomes/node/day²

5th Gen Intel Xeon processors

vs. 5 years ago

Physicians and large medical centers are now using DNA sequencing to identify particular types of cancers and develop new disease treatments. By investing in new Intel Xeon processors, you can speed variant discovery and genotyping, completing genomic analyses faster and at up to 17% lower cost per genome.³



Enable safer federated learning and data collaboration

Adopting a comprehensive security strategy averts breaches from bad actors, helps improve patient privacy, and helps healthcare facilities stay in compliance with industry standards. 5th Gen Intel Xeon processors offer the most comprehensive Confidential Computing portfolio in the industry, including application isolation with Intel SGX, VM isolation with Intel TDX, and independent verification services with Intel Trust Authority.





Personalize healthcare with more efficient natural language processing (NLP)

Up to 9.9x higher BERT-Large performance⁴

5th Gen Intel® Xeon® processors



vs. 3rd Generation



We are entering an era of transformative healthcare with AI NLP tools, which providers can employ to enhance healthcare communication and accessibility. For example, with up to 9.9x higher BERT-large performance on new Intel Xeon processors, healthcare organizations can develop responsive chatbots that understand precise medical conversations, expanding healthcare access through AI-powered telemedicine.



Streamline clinical and lab workflows

Up to 2.14x higher average HPC performance⁵

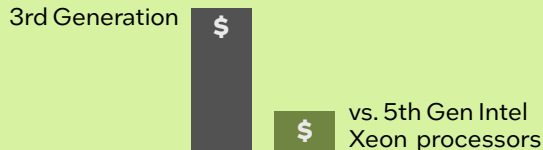


High-performance computing (HPC) is the backbone of modern health and life science research, with scientists using it to expand personalized precision medicine and sequence genomes in search of the cause of diseases. By upgrading to new Intel Xeon processors instead of processors from two generations ago, you'll be getting up to 2.1x higher HPC performance on your computing solutions, which benefits patients, doctors, and clinicians.



Unlock higher quality of healthcare and operational value

Up to 72% TCO savings running DLRM workload⁶



Deep learning and machine learning open the door to effective disease diagnosis, image analysis, drug discovery and delivery, and more. But these technologies require a great deal of compute power—which gets expensive. Compared to older generations, new Intel Xeon processors deliver performance gains when running even demanding Deep Learning Recommendation Model (DLRM) workloads, letting you do the same work with fewer systems.



Reduce your health system's carbon footprint

Up to 10x higher performance per watt⁷

5th Gen Intel Xeon processors



vs. 3rd Generation



Environmental awareness in hospitals and health systems is growing. One simple way to reduce carbon emissions—not to mention cut costs—is by reducing power consumption in the data center and at the edge. New Intel Xeon processors handle more work with lower energy usage, delivering up to 10x higher performance per watt.

To learn more, visit [Intel.com/Health](https://www.intel.com/Health).

1. See [H10] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
2. See [H15] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
3. See [H17] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
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5. See [H1] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.
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7. See [A21] at [intel.com/processorclaims](https://www.intel.com/processorclaims): 5th Gen Intel Xeon processors. Results may vary.



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