AIDAN:
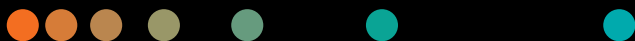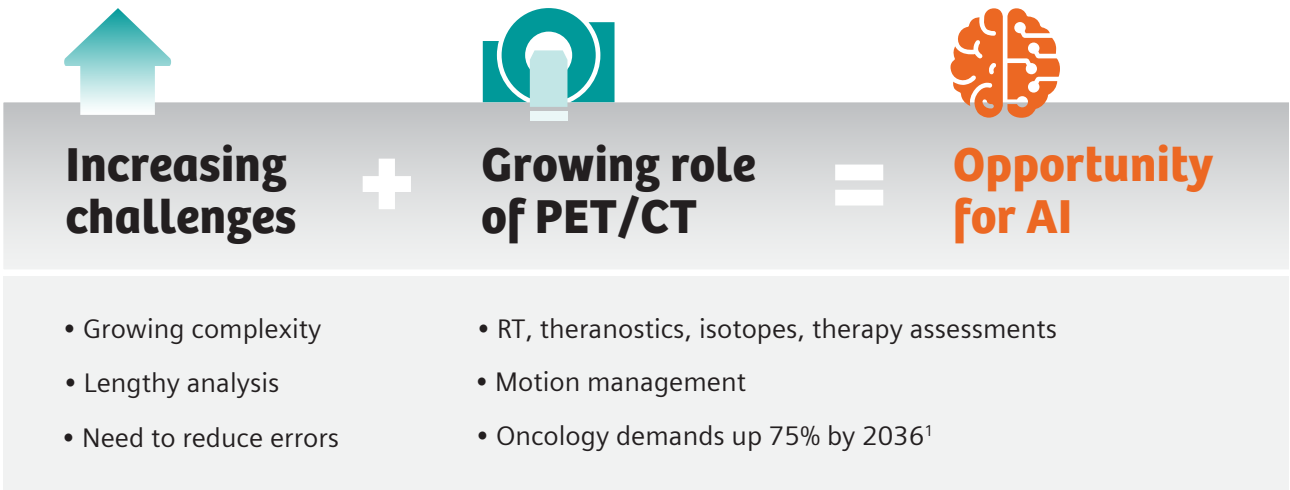# Advance your imaging with AI-enabled Biograph PET/CT

In a world of complex, time-consuming data analysis, the promise of artificial intelligence (AI) to help improve healthcare outcomes is powerful.

AI automates identification of meaningful relationships found in raw data to extract relevant insights and apply those lessons to new patient cases.

Increasing challenges + Growing role of PET/CT = Opportunity for AI

Increasing challenges	Growing role of PET/CT	Opportunity for AI
• Growing complexity	• RT, theranostics, isotopes, therapy assessments	
• Lengthy analysis	• Motion management	
• Need to reduce errors	• Oncology demands up 75% by 2036[1]	

AI-enabled perspectives can help you make more informed clinical decisions. And, with the speed of analysis automation enables, you can better use your expertise and maintain focus on patient care.

This difference is the foundation of the AI capabilities available with Biograph™ PET/CT scanners.

Experience the difference of AI-enabled PET/CT

As the demands on molecular imaging increase, opportunities for streamlined workflows and more sophisticated studies make AI even more important. AIDAN is our intelligent imaging platform for Biograph PET/CT. With AIDAN, you can leverage the demanding processing power of AI-based solutions to perform PET/CT exams with more efficiency—optimizing clinical operations and the patient experience with just a click of a button.

Deepen clinical perspectives

- Tailors workflow and improves clinical image quality
- Integrates motion management and other Biograph PET/CT features

Improve patient and user experience

- Enhances FlowMotion™ capabilities to capture more clinical information for more personalized patient care
- Integrates patient-centered advances that simplify exams for greater patient focus

Optimize department workflow

- Standardizes exams for a high level of care at every interaction
- Reduces the number of clicks for a faster exams and more efficient workflows

As the first company to bring AI-powered applications to PET/CT scanners, AIDAN uses a one-of-a-kind methodology built on more than 700 machine- and deep-learning patents from across Siemens Healthineers with a singular purpose: enhance efficiencies and clinical outcomes.

A better experience for all

"The artificial intelligence used in AIDAN's features is nicely integrated, and it's very natural to use."

John O. Prior, PhD, MD, FEBNM
Professor and Head of Department of Nuclear Medicine and Molecular Imaging,
Lausanne, Switzerland

"AIDAN's features offer tremendous efficiency improvements; when combined over the course of a year, the overall time savings is fairly significant."

Dustin Osborne, PhD
Director, Clinical Research, The University of Tennessee Graduate School of Medicine,
Knoxville, Tennessee

"I think the AI aspects are massively helpful. The automation allows you to focus on things that really matter, like patients."

Katie Morris
Deputy Service Lead for Nuclear Medicine and PET/CT,
The Royal Marsden NHS Foundation Trust,
London, England

AIDAN: an intelligent imaging platform with a wealth of unique features[2]

AIDAN brings together two key technologies—ALPHA and the SMART patient handling system (PHS) to provide a platform for performance-enhancing capabilities.

Instead of relying on manual operations, AIDAN enables a sophisticated AI engine called ALPHA or Anatomical Landmarking and Parsing of Human Anatomy. ALPHA provides visual detection of anatomical structures, leveraging thousands of expert-annotated images and several algorithm modules working together. It uses landmarks and reference regions to learn anatomical locations and can recognize features similar to human visual recognition.

The SMART PHS design enables a unique ability to scan patients with a continuous bed motion (CBM). FlowMotion CBM empowers users to tailor protocols based on clinical indication or individual needs.

By combining CBM with advanced imaging techniques, AIDAN dramatically expands Biograph PET/CT scanner capabilities, enhancing results and clinical workflows. With AIDAN, you can unlock a host of advanced upgradeable features, all with just one click:
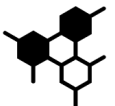
FlowMotion™ AI offers disease-based protocols that intelligently adjust to the patient's anatomy, creating standardized imaging workflows for fast, reproducible, and personalized results.

OncoFreeze™ AI locates and corrects anatomy impacted by respiratory motion and increases clinical confidence without additional setup or patient interaction.

FAST PET Workflow AI boosts technologist efficiency by reducing image processing time and data file size and by creating PACS-ready ranges and automatic data exports.

Multiparametric PET AI expands the available parameters and acquisition flexibility, facilitates more reproducible images, and enables absolute quantification.

For more than 25 years, Siemens Healthineers has been leading the effort to bring advanced functionality to molecular imaging. Through AIDAN, the Biograph family of PET/CT scanners enables an intelligent imaging workflow, empowering you to offer a significantly better experience for the patient, the operator, and the physicians you support.

Transform care delivery and clinical outcomes with AIDAN-enabled Biograph PET/CT.

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[1] IMV 2021 PET imaging market summary report. February 2021.
[2] Submitted as unique in VG80. AI component makes it unique.

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