VelocityAI
VelocityAI is an advanced multi-modality imaging platform built for Radiation Oncology. Created by oncologists, for oncologists, VelocityAI is your department-wide solution for all of your image processing needs.

VelocityAI incorporates the industry-leading multi-modality deformable image registration engine for integrating all images and treatment plans (regardless of source) and combining dose delivered by all treatment modalities, including radiotherapy and brachytherapy. This enables clinicians to make treatment decisions with greater confidence based on multiple imaging modalities, cumulative dose delivered, and a complete record of patient images and plans.

Benefits of VelocityAI
- Automated multi-modality deformable image registration (CT, MR, PET, SPECT, CBCT, KVCT, MVCT)
- Adaptive patient monitoring using onboard imaging
- Multi-modality dose summation for understanding of total dose delivered over multiple treatments

Deformable PET-MR fusion
Advantages of VelocityAI

By automating complex treatment planning tasks, VelocityAI allows clinicians to incorporate functional imaging data into treatment planning and response assessment. In addition, VelocityAI has a range of automated clinical workflow tools that improve department efficiency, including:

- Velocity Navigator™ helps to guide users through complex imaging workflows by automating workflow, including 4DCT ITV creation, dose summation, adaptive and much more.
- Response assessment allows for evaluation of changes in biologic activity of a patient’s cancer over time.
- Adaptive Radiation Therapy (ART) enables adaptive contouring for re-planning patients as well as dose and structure tracking on 4DCT and CBCT datasets.
- Plan Review provides automated treatment plan evaluation and easy creation of isodose curves and dose volume histograms.

Deformable fusion

Using multiple deformable algorithms, Velocity enables you to register imaging acquired in a non-treatment planning position to your simulation images for accurate target delineation. VelocityAI lets you automatically register any combination of CT, CBCT, MR, SPECT, PET and DICOM-RT objects using both rigid and non-rigid algorithms.

Manual Contouring

VelocityAI has created the most advanced manual contouring platform on the market to give users the department-wide solution that they desire. With VelocityAI, you can standardize on one radiation oncology designed interface for all of your contouring, fusion, and plan review needs. VelocityGRID’s flexibility seamlessly integrates into your department and allows users to access their data on any workstation or laptop.

Key Features

- Deformable fusion of all imaging modalities (MR, PET/CT, CBCT, MVCT, SPECT-CT, CTsim)
- Integrate with all TPS, PACS and imaging modalities
- Quantitatively compare images for longitudinal analysis, regardless of source and time
- Combines plans from different planning and delivery system
- Dose summation includes external beam treatments and brachytherapy
- Track anatomical changes between planning CT images and CBCT images acquired during treatment delivery
- Clinical decision support modules
- Generate reports that can be viewed on any workstation, laptop or mobile device

Velocity Medical Solutions

Velocity represents the next generation of intelligent radiation treatment tools. Velocity’s vendor-neutral platform gives clinicians a fully integrated record of ALL diagnostic, planning and delivery data, regardless of origin. This enables clinicians to make treatment decisions with greater confidence based on multiple imaging modalities, cumulative dose delivered, and a complete record of patient images and plans. Learn more at www.velocitymedical.com.