AMRA® BCP Service Requirements

These are the service requirements for the AMRA® BCP Protocol (BCP stands for Body Composition Profile). The MRI scan enables regional and global segmentation and quantification of muscle and fat tissue volumes in the body. AMRA® BCP Protocol Installation and Scan Guides are available for the listed MRI systems.

IMAGE REQUIREMENTS

For body composition measurement, fat, water, in-phase (IP) and opposed-phase (OP) Dixon images are required. The images should be acquired with Lava-Flex (GE), mDixon (Philips) or Dixon-Vibe (Siemens), using only the scanner's integrated body coil. For AMRA to analyze previously acquired MR images, the images must have been acquired using fat-water separated imaging and include the image types mentioned above.

For analysis of liver fat, it is preferable that the images be acquired using the vendor's liver application. Either Ideal-IQ (GE), mDixon-Quant (Philips) or LiverLab (Siemens) and ensuring fat fraction, fat, water and R2* images are reconstructed. Liver imaging requires a dedicated anterior and posterior surface coil.

SUPPORTED MRI SYSTEMS

The following tables specifies the minimum MRI system requirements to produce water-fat separated images of analyzable quality. If a particular MRI system is not listed below, please contact AMRA for support (support@amramedical.com).

SUPPORTED BODY IMAGING PLATFORMS

GE	
Scanner Model	**Software Version**
3T systems SIGNA Premier SIGNA Architect SIGNA Pioneer SIGNA PET/MR Discovery MR750w GEM Discovery MR750	SV25 DV25 DV26 DV27 PX25* PX26 RX27 RX28 MP24 MP26
1.5T systems SIGNA Artist SIGNA Explorer SIGNA Creator* SIGNA Voyager Discovery MR450 Optima MR450w GEM Optima MR450w Optima MR360 Brivo MR355*	
Upgraded systems SIGNA Premier Lift* SIGNA Architect Lift* Discovery MR750 Lift* SIGNA Artist Lift* SIGNA Explorer Lift*	

* Unverified

PHILIPS	
Scanner Model	**Software Version**
3T systems Ingenia Elition 3.0T X/S Ingenia 3.0T CX Ingenia 3.0T Achieva 3.0T	Release 5.1 Release 5.2* Release 5.3 Release 5.4 Release 5.5 Release 5.6 Release 6*
1.5T systems Ingenia Ambition 1.5T X/S Ingenia Prodiva 1.5T CX/CS* Ingenia 1.5T CX/S Ingenia 1.5T Achieva 1.5T Multiva 1.5T*	
Upgraded systems Achieva 3.0T dStream Achieva 1.5T dStream	*Release 5.3 and older require mDixon-Quant for liver fat (PDFF) measurement.*

* Unverified

SIEMENS	
Scanner Model	**Software Version**
3T systems MAGNETOM Vida MAGNETOM Prisma MAGNETOM Skyra MAGNETOM Verio MAGNETOM Lumina* MAGNETOM Spectra* MAGNETOM Biograph mMR	B19 B20* D13 E11 XA10 XA11 XA12* XA20
1.5T systems MAGNETOM Aera MAGNETOM Sola* MAGNETOM Altea MAGNETOM Amira* MAGNETOM Sempra*	
Upgraded systems MAGNETOM Vida Fit* MAGNETOM Prisma Fit MAGNETOM Skyra Fit MAGNETOM Sola Fit* MAGNETOM Avanto Fit	

* Unverified

SUPPORTED LIVER IMAGING PLATFORMS

Vendor	Clinical Application
GE	Ideal-IQ
PHILIPS	mDixon-Quant
SIEMENS	LiverLab

An alternative liver imaging method is available if the liver application is not available. Please contact support@amramedical.com for further information.