

AMRA® BCP Service Requirements

This is 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 most of the listed MRI systems.

Image Requirements

For body composition measurement with AMRA® Profiler or AMRA® Researcher, we require fat, water, in-phase (IP) and opposed-phase (OP) Dixon images to be sent to us. The images are 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, we prefer that the images are acquired with the vendor's liver application. This can be either Ideal-IQ (GE), mDixon-Quant (Philips) or LiverLab (Siemens). We require fat fraction, fat, water and R2* images to be sent to us. Liver imaging requires a dedicated anterior surface coil.

Supported MRI Systems

The following tables specifies the minimum requirements of the MRI system to produce stable water-fat separated images, i.e., images that can be fed directly into AMRA® Profiler or AMRA® Researcher. If your 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
1.5T systems SIGNA Artist SIGNA Explorer SIGNA Creator* SIGNA Voyager Discovery MR450 Optima MR450w GEM Optima MR450w Optima MR360 Brivo MR355*	RX27 MP24 MP26
Upgraded systems SIGNA Premier Lift* SIGNA Architect Lift* Discovery MR750 Lift* SIGNA Artist Lift* SIGNA Explorer Lift*	

* Not verified

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
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*	Release 5.5 Release 5.6 Release 6*
Upgraded systems Achieva 3.0T dStream Achieva 1.5T dStream	<i>Release 5.3 and older require mDixon-Quant for liver fat (PDF) measurement.</i>

* Not verified

SIEMENS	
Scanner Model	Software Version
3T systems MAGNETOM Vida MAGNETOM Prisma MAGNETOM Skyra MAGNETOM Verio MAGNETOM Lumina* MAGNETOM Spectra* MAGNETOM Biograph mMR	B19 D13 E11 XA10* XA11
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	

* Not verified

Supported liver imaging platforms

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

An alternative liver imaging method is available from AMRA if the liver application is not available on the scanner.