

# 3 Tesla Magnetic Resonance Imaging

Better anatomical resolution and faster image acquisition

## Advantages of 3 Tesla versus 1.5 Tesla MRI



### Neurology

- Gold standard for study of the brain and spinal cord.
- Assessment of the central nervous system and highly-detailed visualisation of cerebral structures.
- Observation of brain function in real time. Detection of areas of neuronal activation as they occur.
- High degree of characterisation due to techniques such as spectroscopy, tractography and functional imaging.



## Cardiology and Digestive System

 Complete free-breathing during abdominal and cardiac investigations.



#### Musculoskeletal System

- Exceptional anatomical detail of the smallest structures.
- Submillimetre resolution able to detect emerging cartilage lesions.
- Gold-standard technique for the assessment of peripheral nerves.



#### **Breast**

- Higher precision and better detection of breast pathology, showing lesions which cannot be identified on mammography or ultrasound.
- Very early detection of lesions, including in dense breasts.



#### Prostate

- More information on the size and location of the cancer, its cellular density and microvascularisation.
- High degree of visualisation thanks to multiparametric studies which not only analyse anatomical structure, but also functional behaviour, using enhancement maps and contrast washout.
- Optimal technique for guidance prior to biopsy and especially for the staging and monitoring of treatment.



#### Whole-body

- Considered first-line imaging for metastasis tracer studies.
- Higher sensitivity than gammagraphy for the detection of bone metastasis in advanced prostate cancer.

# Comfortable for the patient

- 70 cm opening, reduces the feeling of claustrophobia.
- The patient spends less time inside the scanner.
- Precise, reliable information, reported within 24 hours.
- All the tests are performed under one roof.
- No appointment necessary, if the test does not require special preparation beforehand.