

# **Tissue Imaging Services Using Radiolabelled Compounds**

Pharmaron performs Quantitative Whole Body Autoradiography (QWBA) and microautoradiography (mARG) studies on a wide range of compounds including biologics. Pharmaron's UK site provides radiolabelling options for both <sup>14</sup>C and <sup>3</sup>H.

## **Capabilities**

- Custom radiosynthesis of <sup>14</sup>C and <sup>3</sup>H compounds
- <sup>14</sup>C and <sup>3</sup>H RadioTag<sup>®</sup> for macromolecules
- QWBA
- mARG
- Dosimetry assessment
- Novel real-time digital imaging
- Non-clinical ADME
  - Excretion balance
  - Metabolite profiling
  - Metabolite ID
- ADME in pharmacology models
- Catabolite profiling for large molecules

### **Services**

#### Radiosynthesis

- Custom radiosynthesis of <sup>14</sup>C and <sup>3</sup>H labelled molecules
- Radiolabelling of peptides, proteins and antibody-drug conjugates (ADCs)
- Tritiated oligonucleotide synthesis
- Covalent radiolabelling techniques with <sup>3</sup>H/<sup>14</sup>C (RadioTag<sup>®</sup>) for macromolecules

#### Quantitative Whole Body Autoradiography (QWBA)

- Distribution of drug-related material in blood and tissues
- Target organ engagement for drug-related material (e.g. CNS, liver, kidney)
- Identify sites of accumulation or disposition
- · Assess melanin-binding in pigmented tissues
- Fetal exposure and milk secretion to support teratology studies
- Human dosimetry and dosimetry reports for clinical metabolism studies

#### Microautoradiography (mARG)

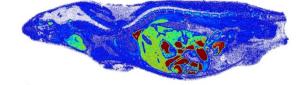
- High resolution imaging for both intra-organ and intracellular distribution
- Identification of binding sites within organs and cells
- Receptor occupancy studies and immunohistochemistry

#### Novel Real Time Autoradiography

- Fast turnaround digital tissue imaging to support early phase investigations
- Differential tissue distribution for dual <sup>3</sup>H/<sup>14</sup>C radiolabelled compounds

#### **Real-time Digital Imaging**

#### 6 hours post <sup>3</sup>H-amlodypine administration







Laboratory Services



Chemistry, Manufacturing and Control



24 hours post <sup>3</sup>H-amlodypine administration



Pharmaron is a premier R&D service provider for the life sciences industry that offers a broad spectrum of research, development and manufacturing service capabilities throughout the entire drug discovery, preclinical and clinical development process across multiple therapeutic modalities, including small molecules, biologics and CGT products.