

# 澳大利亚医疗技术公司名录



## 公司详情

公司名称：Imagion Biosystems

主要联系人姓名：Leanne Daly

主要联系人岗位头衔：业务发展 Leanne.daly@imagionBio.com

公司网站：[imagionbiosystems.com](http://imagionbiosystems.com)

公司地址：Level 8 555 Bourke St Melbourne Victoria 3000 澳大利亚

公司是否上市：已上市

☒ 上市

☐ 未上市

## 公司简介

Imagion Biosystems 是一家澳大利亚上市公司，位在墨尔本和圣地亚哥。

公司专注于飞速崛起的纳米生物技术领域，重点从事癌症和其他人类疾病的早期发现工作。公司技术还应用于治疗这些疾病的影像辅助疗法，同时也提供新的治疗干预方法。

由于当前的癌症筛查和诊断方法无法在肿瘤较早的阶段发现，错失干预手段预期效果最好的时机，癌症依旧是死亡率和发病率的主要原因。医学成像技术无法区分良性和恶性肿瘤，需要实行昂贵且高风险的外科活体检查才能确认。癌症相关统计数据明确显示：及早诊断才是改善治疗成果的关键。本公司正在开发一个诊断平台，能够：**a)** 替代侵入式手术和活体检查，提供相似的肿瘤表现型特异性，及**b)** 在小肿瘤早期形成阶段发现并定位。

公司的 MagSense™ 技术是一项全新的活体测定方法，而不是对现有医学成像技术的改进。它能对已发展出实体肿瘤的癌症实施非侵入式、分子特异性的探测和分期。这项技术采用对生物无害的纳米颗粒来靶定癌细胞，随后通过公司高敏感性磁传感器来实施探测。

MagSense 技术不同于其他成像技术，能够实现特异性肿瘤的定位和量化。

这项技术在美国和中国等主要市场均已取得专利，拥有强大的专利组合保护。

这项技术也已被 FDA 指定为医疗器械组合产品。公司预期在实施首次转移性 HER2 乳癌检测临床试验后，有望取得 510K 注册。产品开发计划包括拓展检测平台，使之替代前列腺活体检查来应用于前列腺癌检查、替代超声波检查来检查卵巢癌以及肺癌。

## 关键或领先技术

MagSense™临床诊断系统是一项医疗器械组合产品，用于实体肿瘤的非侵入式检测和分期。MagSense 技术包括专利检测仪器和癌细胞专用纳米颗粒试剂盒。该试剂盒是一种含具生物功能纳米颗粒的可注射溶液，能够靶定特异性癌症表现型。抗体或其他靶向配体附在纳米颗粒上，针对具体的癌症类型实施靶向给药。

该仪器可用来检测不同类型的癌症，而纳米颗粒试剂则能针对患者实施检查。这就形成了一种“打印机和墨水”的业务模式，即每一台安装仪器都能通过用于检查患者的纳米颗粒试剂，源源不断地带来收入。

## 类别

- 诊断
- X 诊断肿瘤学

## 下列哪项最能说明贵公司主要或领先技术的研发点？

- X 临床前研究

## 寻求机会

我们希望与潜在的开发合作伙伴和商业化合作伙伴建立合作关系，并寻求及有意向的投资者投资于将在 2019 年开展的一项关键临床试验。

# Directory of Australian medtech companies



## COMPANY DETAILS

**Company name:** Imagination Biosystems

**Key contact name:** Leanne Daly

**Job title of key contact:** Business Development    Leanne.daly@imaginationBio.com

**Company website:**     [imaginationbiosystems.com](http://imaginationbiosystems.com)

**Company address:**     Level 8 555 Bourke St Melbourne Victoria 3000

**The company is:** The Company is listed

☒     Listed

☐     Unlisted

## ABOUT THE COMPANY

Imagination Biosystems is an Australian listed company based in Melbourne and San Diego.

Our focus is in the rapidly emerging field of nanobiotechnology with an emphasis on the early detection of cancer and other human diseases. Our technologies also have application in image-guided therapy for the treatment of these diseases, as well as providing new methods for therapeutic intervention.

Cancer continues to be a leading cause of mortality and morbidity because current cancer screening and diagnostic methods don't detect tumors at the earlier stages when intervention is likely to be most beneficial. Medical imaging technologies cannot differentiate benign from malignant tumors and require expensive, and risky, surgical biopsies for confirmation. Cancer statistics clearly show that earlier diagnosis is at the heart of improving outcomes. Our company is developing a diagnostic platform that **a)** can be used as an alternative to invasive surgical and biopsy procedures providing comparable tumor phenotype specificity, and **b)** can detect and locate small tumors when in early stage development.

Our MagSense™ technology is a new method for *in vivo* detection, not an improvement of existing medical imaging technologies. It provides a non-invasive, molecularly specific, detection and staging of solid tumor cancers. The technology uses bio-safe nanoparticles to target cancer cells, which can then be detected using our highly sensitive magnetic sensors. Unlike other imaging technologies, MagSense technology is able to both locate and quantify specific tumor phenotypes.

The technology is protected by a strong patent portfolio, with patents issued in key markets including the United States and China.

The technology has been designated by the FDA as a medical device combination product. The company expects to achieve a 510K registration following its first clinical study for the detection of metastatic HER2 breast cancer. The product development pipeline includes extending the detection platform for use in prostate cancer as an alternative to prostate biopsies, ovarian cancer as an alternative to ultrasound, and lung cancer.

#### **KEY OR LEAD TECHNOLOGY**

The MagSense™ Clinical Diagnostic System is a medical device combination product for the non-invasive detection and staging of solid tumours. MagSense technology includes both a proprietary detection instrument and a cancer-specific nanoparticle test kit. The test kit is an injectable solution of bio-functional nanoparticles that are able to target specific cancer phenotypes. Antibodies, or other targeting ligands, are attached to the nanoparticle to provide targeted delivery to the specific type of cancer.

The instrument can be used for detecting different types of cancers, while the nanoparticle reagent provides the patient specific test. This creates a “printer and ink” business model where every installed instrument is a source of recurring revenue from the nanoparticle reagent used to test patients.

#### **Category**

- **Diagnostics**

X      Diagnostics oncology

#### **Which of the following best describes the point of development of your key or lead technology?**

X      Pre-clinical

#### **OPPORTUNITIES SOUGHT**

We are seeking to form relationships with potential development and commercialisation partners as well as investors interested in funding a pivotal clinical trial to take place in 2019.