

## Anti Bacterial Agent from Barrientosiimonas Humi for Medical Use

### TECHNOLOGY DESCRIPTION

The technology is relates to the extraction of Barrientosiimonas humi (B. humi) for antibacterial activity and cytotoxic activity.

### TECHNOLOGY FEATURES

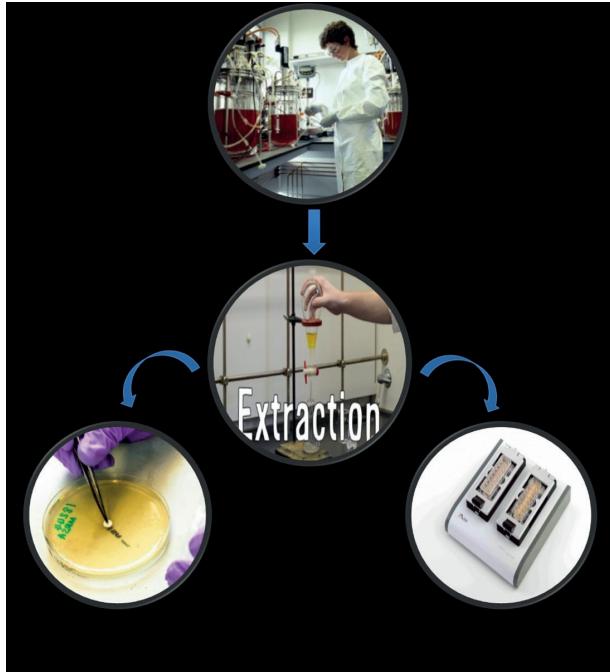
This invention is the extraction of Ethyl acetate from B.humi which able to exhibit antibacterial activity against multiple pathogens and against different human cancer cell lines. It is originated from natural product, hence, safe to use. This technology is useful in health care of veterinary.

### ADVANTAGES

- Novel potential therapeutic targets in multiple cancers and bacterial infections.
- Natural product
- No side effect

### INDUSTRY OVERVIEW

#### Prospect: Healthcare Industry, Pharmaceutical Industry



Many studies in the past looked at ways to battle cancer. Immunotherapy is the latest effort made by hacking the immune system—essentially, teaching it how to attack cancer cells, which it would otherwise ignore. There are huge advantages to immunotherapy compared to traditional cancer treatments which are chemotherapy and radiation. *Salmonella* is one of the few strains of bacteria, along with *Listeria* and *Clostridium* used in the immunotherapy. *Barrientosiimonas humi* (B. humi) is a novel genus of phylum Actinobacteria and was discovered from Antarctica, a poorly explored region on Earth. Novel bacteria are bearing high capability of producing novel secondary metabolites with unique biological activities. This invention allows novel potential therapeutic targets in multiple cancers and bacterial infections compared to the available synthetic drugs that tend to have fewer therapeutics effects and cause unacceptable side effects. Among the key players of pharmaceutical companies in the world include Johnson & Johnson, Novartis, Roche, Pfizer, Sanofi, Merck, GlaxoSmithKline, AstraZeneca, Bayer, and Gilead Sciences. Locally, the Ministry of Health indicates that there are 132 Government Hospitals and 9 Special Medical Institutions with 1039, 1821, and 254 Health Clinics, Community Clinics, and 1 Malaysia Clinics respectively in Malaysia with an additional 214 Private Facilities. In addition, there are 637 SMEs that operate in the healthcare industry and another 342 in the pharmaceutical industry. These organizations might see the product as relevant to them.

**Assoc. Prof. Dr. Cheah Yoke Kqueen**  
Faculty of Medicine and Health Sciences