

Plant

DRUG DEVELOPMENT PIPELINE

Drug

2004 – 2006 (Budget R18 m)

2007 - 2008

Proof of principle

Proof of concept

Technology transfer

BASIC RESEARCH

DEVELOPMENT

VALIDATION OF EFFICACY & SAFETY

UPSCALING OF PROD. & INITIAL AGRO-PROCESSING

PHARMA-CEUTICAL DEVELOP.

- Plant selection
- Plant collection
- Extraction
- Screening for activity
- Bio-fractionation
- Identification of active compound
- Chemical characterisation
- Synthesis and testing of structural analogues

- Testing in animal models of disease
- Pharmaceutical formulation
- Essential pharmacokinetics
- Exploration of mechanism of action including genetic basis of activity
- Bio-availability testing
- Manufacturing under GMP Compliance
- Analysis & standardisation

- Early introduction to humans under GCP conditions
- Phase I & Phase II clinical trials
- Advanced toxicity testing

- South African industry partnerships

- Dialogue with regulatory authorities
- Patenting of final product
- Pharmaceutical industry partners, manufacturing, agro-processing without transfer of ownership

Establishment and completion of technology platform