

Project GAIA, Stage 1

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Overview

Over the years, biotechnological de	evelopments have allowed A.C.R.E scientists to
alter the genetic make-up of	. Initially, these modifications have served
the purpose of	, but these techniques quickly
became promising tools from an agricultu novel traits to organisms which may incre	aral point of view since they allow the addition of ease their suitability for use in
With this new project we intend to	take our research
techniques not just on the	e . These modifications
These are just a few examples of what we	at A.C.R.E. could do.

Goals

- 1. Safely and securely begin the testing and of
- 2. Troubleshoot and ensure
- 3. Put into place a plan including clinical trials.

Specifications

Figure 1 Has outlined a few of the use in the upcoming projects on ...



Species	Category	ID	Transgene	Origin	Effect/Goal
		1			Disease Resistance
		2			Disease Resistance
		3			General Health
		4			General Health
		5		Piscine	Growth Rate
		6			Disease Resistance
		7			Disease Resistance
		8		Human-	General Health
		9		Human-	Anti clotting agent
		10		E. Coli-	Feed uptake
		11		Human-	Growth rate
		12			Muscle development

Figure 1.

Outline of Clinical Trials

Four phases of clinical trials and medicine development exist and are defined below. Each of these definitions is a functional one and the terms are not defined on a strict chronological basis. An investigational medicine is often evaluated in two or more phases simultaneously in different clinical trials. Also, some clinical trials may overlap two different phases.

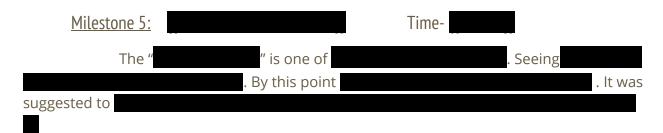
<u>Phase I:</u> Initial safety trials on the
volunteers for Phase I trials are sometimes conducted when pharmacokinetic issues Pharmacokinetic trials are
usually considered Phase I trials regardless of when they are conducted during development.
Phase IIa: Pilot clinical trials to evaluate in selected populations we deem worthy. Objectives may focus
other characteristics of .
Phase IIb: Well controlled trials to These clinical trials usually represent the most rigorous
Phase IIIa: Trials conducted after submission of a or other dossier. These clinical trials are conducted
eventually intended. Phase IIIa clinical trials generate additional data on
both in relatively large numbers in both Clinical trials are also conducted in special groups
, or under special conditions. These trials often provide much of the information needed for
Phase IIIb: Clinical trials conducted , but prior to
launch. These trials may supplement earlier trials, complete earlier trials, or may be directed toward new types of trials or Phase IV evaluations.
This is the period between submission and approval
Phase IV: Studies or trials conducted after the
can be studied.



Milestones

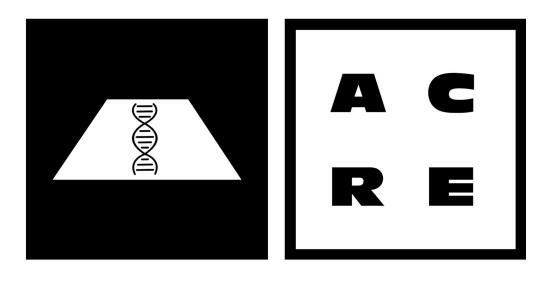
As laid out above in the Below is the timeline of Miles	stones in which we wish to hit.
. We of the prope	Time: opment usually takes anywhere from have been using theses methods er procedures and have expedited the process down to a gress into the next phase of the trial.
Milestone 2: Phase 1 can begin trial consists of a test group of beto.	. Time: The first tween individuals and each trial will run
Milestone 3: Phase 2 will consist program for	individuals at a time who will be participating in the tinue to monitor. We will
Milestone 4: Phase 3 will test phase we will This phase will run for	at a time. During this





Below is Figure 2 which is a flowchart of the proposed Project GAIA.





Project GAIA, Stage 2



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