

Category

Best Startup

General Information**Company Name ***

Anastasis Biotec Ltd

Turnover and/or Funding

£1m.

Funding, so far, based on grants and equity investment.

words remaining :

490

Sub-Category *

Biotechnology

Background

Corporate history (creation, key milestones, main funding,...)Information on Condition / Disease and need for solution / product (prevalence, existing treatments / solutions)

(please be as specific as possible in your description; limit 500 words)

Based on more than 10 years of academic research at Imperial College London by the Company's founders, Anastasis Biotec Ltd (ABL) was founded to develop cancer therapies to control and modulate gene expression and bring to market patient centric cancer therapeutics.

ABL has a unique cell penetrating technology ANTP (Antennapedia) based on which the Company has generated two proprietary therapeutic human protein drug candidates (S4 and AB1) selectively targeting driving cancer mutations involved in dysregulations of the Mastermind-like (MAML) and p53 pathways such as Triple Negative Breast Cancer (TNBC). Currently there are no approved treatments addressing Mastermind and p53 associated cancers.

We aim to raise initially £8m to complete IND enabling studies followed by £22m to complete a phase Ia/Ib trial of the lead product S4.

words remaining :

373

History of the development of the solution/product (Intellectual Property, preclinical and clinical data, development collaborations) *

(please be as specific as possible in your description; 500 words)

The lead human protein product, S4, is a Mastermind (MAM) inhibitor.

About MAM

The MAM gene is involved in multiple signalling pathways playing a crucial role in regulating gene expression in various cellular processes, including cancer

It is a key co-activator in the Notch signalling pathway but is also involved in other signalling pathways like Wnt, TGF-beta,

Hedgehog, BMP, MAPK/ERK, NF-kB and epigenetic signalling demonstrating its potential relevance in the development and progression of cancer.

S4 | Targeting Mastermind-like (MAML) for cancer therapy

Mastermind-like (MAML) proteins are transcriptional co-activators essential for Notch and other cancer associated signalling pathways driving many cancer types, including breast, prostate, pancreatic colorectal, lung, glioblastoma multiforme , leukaemia etc. Thus, targeting the MAML transcription factor for cancer therapy is a promising approach.

S4 is a novel and proprietary human therapeutic protein composed of the non-viral, cell penetrating protein Antennapedia (ANTP) joined to a dominant negative (DN)

Mastermind-like peptide (DN-MAML), that competes and inhibits activated Mastermind (MAML) in mutated cancer cells including Notch driving mutations.

S4 is designed to inhibit selectively cancer and cancer stem cells bearing Notch mutations, without affecting normal cells.

There are patents granted in the USA and China and pending in the UK and EU.

Prclinical studies demonstrate S4 efficacy and safety but we now wish to conduct IND enabling studies (£8m) prior to conducting a phase I/II (£22m) in patients with relapsed TNBC (triple negative breast cancer) harbouring Notch mutations

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Why this drug or device is innovative, the broad implications for future research, and/or how it will improve the human condition *

S4 | Mastermind (MAM) inhibitor

About MAM

The MAM gene is involved in multiple signalling pathways playing a crucial role in regulating gene expression in various cellular processes, including cancer and neurodegenerative disorders.

The Mastermind (MAM) gene is a co-activator essential for the Notch signalling pathway and is known to be involved with other major signalling pathways like Wnt, TGF-beta, Hedgehog, BMP, MAPK/EKR, NF-kb and epigenetic signalling. MAM involvement in multiple signalling pathways highlights its importance in various cellular processes and its potential relevance in the development and progression of cancer.

S4 | Targeting Mastermind-like (MAML) for cancer therapy

Mastermind-like (MAML) proteins are transcriptional co-activators essential for Notch and other cancer associated signalling pathways driving many cancer types, including breast, prostate, pancreatic colorectal, lung, glioblastoma multiforme , leukaemia etc. Thus, targeting the MAML transcription factor for cancer therapy is a promising approach.

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Antennapedia (ANTP) joined to a dominant negative (DN)

Mastermind-like peptide (DN-MAML), that competes and inhibits activated Mastermind (MAML) in mutated cancer cells.

Thus, S4 is designed to inhibit selectively cancer and cancer stem cells bearing Notch and other Mastermind related DNA abnormalities and mutations, without affecting normal cells.

words remaining :

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Please provide appropriate references (PubMed, Abstract, Website) *

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