



STRICTLY CONFIDENTIAL | NOVEMBER 2024

# Project Neuron

Teaser



For additional information, please read carefully the notice at the end of this presentation.

# Executive Summary



BTG Pactual has been engaged by Cellavita (the “Company”) as its exclusive financial advisor in connection with a potential capital raise in the Company (the “Transaction”)

## Process Overview

### Process overview

- The Company selected a strict group of potential investors to pursue the Transaction
- The Transaction considers a capital raise to fund Cellavita’s growth

### Process and next steps

- Together with this Investment Teaser, investors will receive a draft of the Non-Disclosure Agreement (“NDA”) which, once signed, will grant access to an information package containing a Confidential Information Memorandum and a financial model
- Upon receipt of the information package, investors will have the opportunity to conduct organized Q&A rounds with the Advisor

### All inquiries related to the process should be directed to BTG Pactual

- Company’s representatives, the shareholders or any of its affiliates’ representatives must not be contacted directly under any circumstances
- All the information should be directed to BTG Pactual’s team dedicated to this Transaction

## Deal Team

All communications or inquiries relating to the Transaction should be directed to BTG Pactual. Please direct all inquiries to any of the following BTG Pactual contacts:



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### Luis Campos

*Analyst – Execution*  
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# Cellavita at a Glance

Cellavita is a clinical stage biotechnology company operating in Brazil and U.S. focused on the development of disruptive and innovative advanced cell therapy products for the treatment of rare life-threatening diseases, as well as products for significant unmet medical needs



Currently in **Partnership with Butantan Institute** for Nestacell® Phase III study in **Huntington's Disease** aiming market authorization in **multiple geographies**



Pre-clinical studies of Nestacell® in **ALS and Parkinson** with promising results for the **future Phase II program**



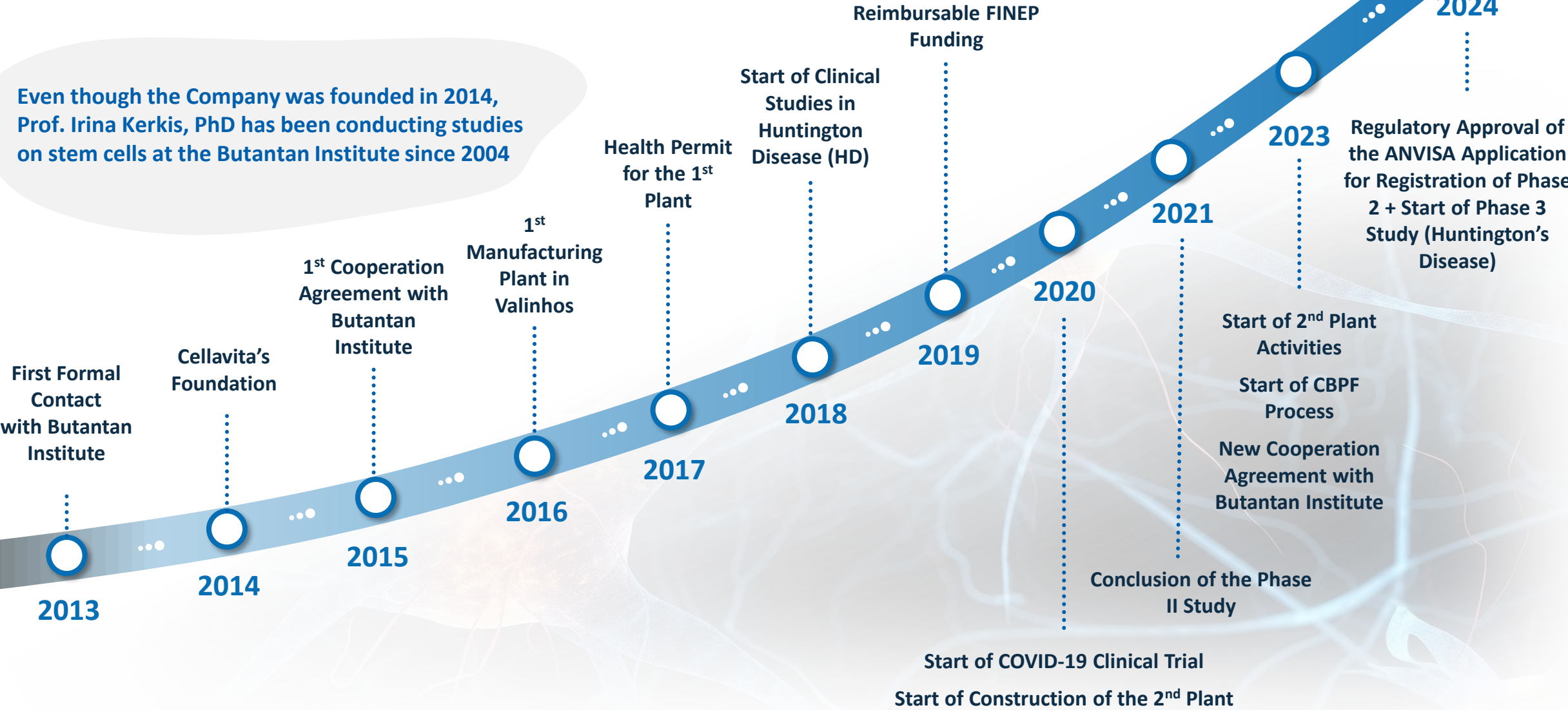
Exosomes isolated from the Nestacell® is an alternative to I.V. **Pharmaceutical Forms (NestaExo)**

- **Nasal spray** application being studied in Parkinson's Disease
- Nestaexo can **reduce and control cancerous tumors** and serve as a **nanocarrier of anti-carcinogenic molecules**

Cellavita has a subsidized financing from the Federal Government's FINEP and Nestacell® is already patent granted in the U.S. and Europe

# Solid Story of Progress in the History of Cellavita

Even though the Company was founded in 2014, Prof. Irina Kerkis, PhD has been conducting studies on stem cells at the Butantan Institute since 2004



# NestaCell® is on the Road to Become a Revolutionary Treatment to Neurological Diseases



## Promising

- ✓ A cell more **similar to central nervous system** cells than other stem cells
  - ✓ **Established IV product** from dental pulp of deciduous teeth
  - ✓ **Allogeneic stem cells** with **standardized lots for high volumes production**



## Innovative

- ✓ **Patented technology** (exclusive from Cellavita) obtained through a **very efficient production process**
  - ✓ **Uniform**
  - ✓ **Well-characterized**
  - ✓ **Highly reproducible** cell population from a **single donor** (US9790468)



## Clinically Tested & Safe

- ✓ **Proven effectiveness** in **Huntington's Disease** with potential to be applicable to **Parkinson's Disease, ALS and other diseases**
  - ✓ **Huntington: Successful phase 2** of clinical study **completed** in 2021 and **commencing Phase 3** clinical study
  - ✓ **Parkinson and ALS: Pre-clinical studies ongoing** with **promising results** for future **Phase 2 clinical study**
  - ✓ **Immuno-evasive, no immune suppression required**



## High Quality Production Process

- ✓ Cells are handled in a **controlled "ISO5" environment** surrounded by an **ISO7/resting or ISO8 controlled environment in operation**
- ✓ **Quality parameters follow the regulations** of Anvisa, International Cellular Therapy Society and EMA<sup>(1)</sup>



# State-of-the-Art Infrastructure

ISO5 biosafety cabinet located in an ISO7 or ISO8 controlled environment under the Good Manufacturing Practices for Advanced Cell Therapy regulations of Anvisa, FDA, and EMA

## Productive Plant Expansion Successfully Built



Manufacturing Plant Expansion for Large-Scale Production of Advanced Therapy Products



Located in Valinhos, São Paulo, Brazil



Building conclusion completed in November 2022

## Facilities Inside the Productive Plant



Stock



Cryopreservation Room



Offices



Cell Expansion / Filling Room



Quality Control



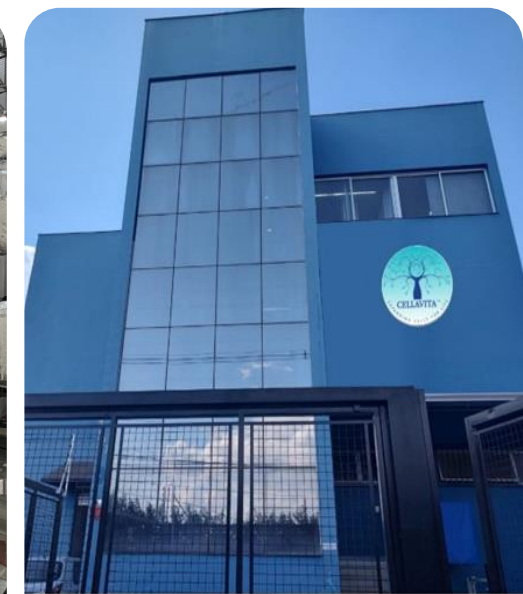
Quality Assurance



Waste Washing and Disposal Room



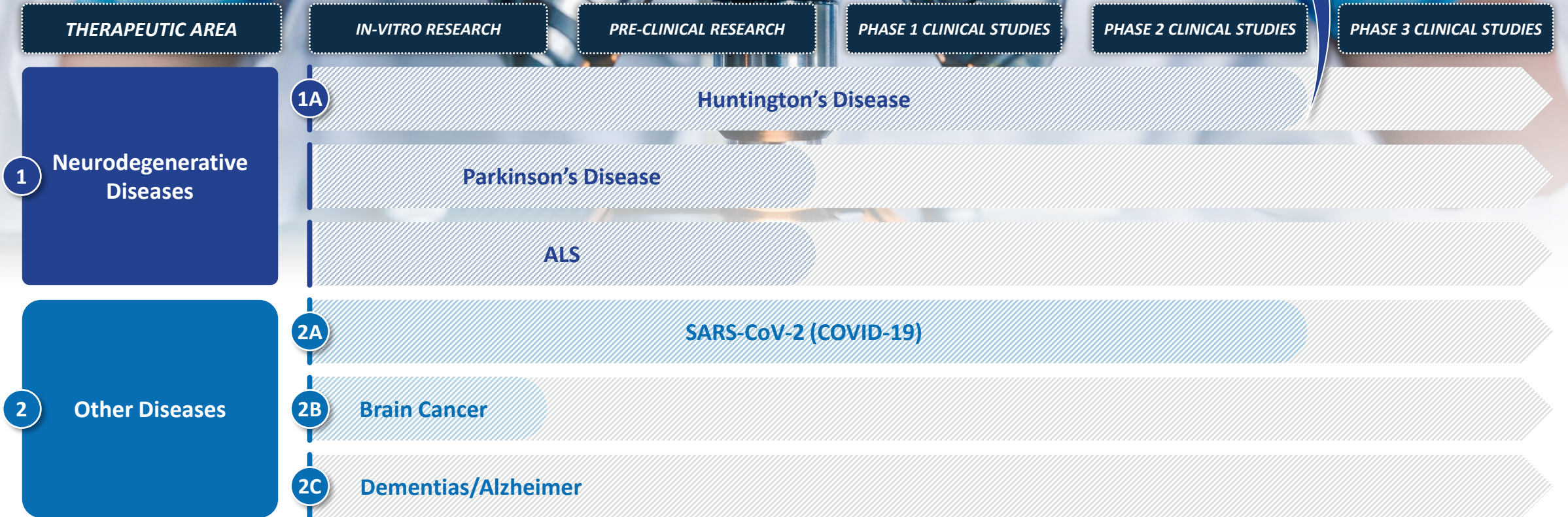
Reception Room for Materials and Biological Materials



# Development Pipeline



**Current Status:**  
Regulatory Approval from ANVISA of  
the Application for Registration of  
Phase 2 + Start of Phase 3 Study



# Nestacell® Represents a Distinct Type of Mesenchymal Stem Cell (MSC)



## Key Research Highlights

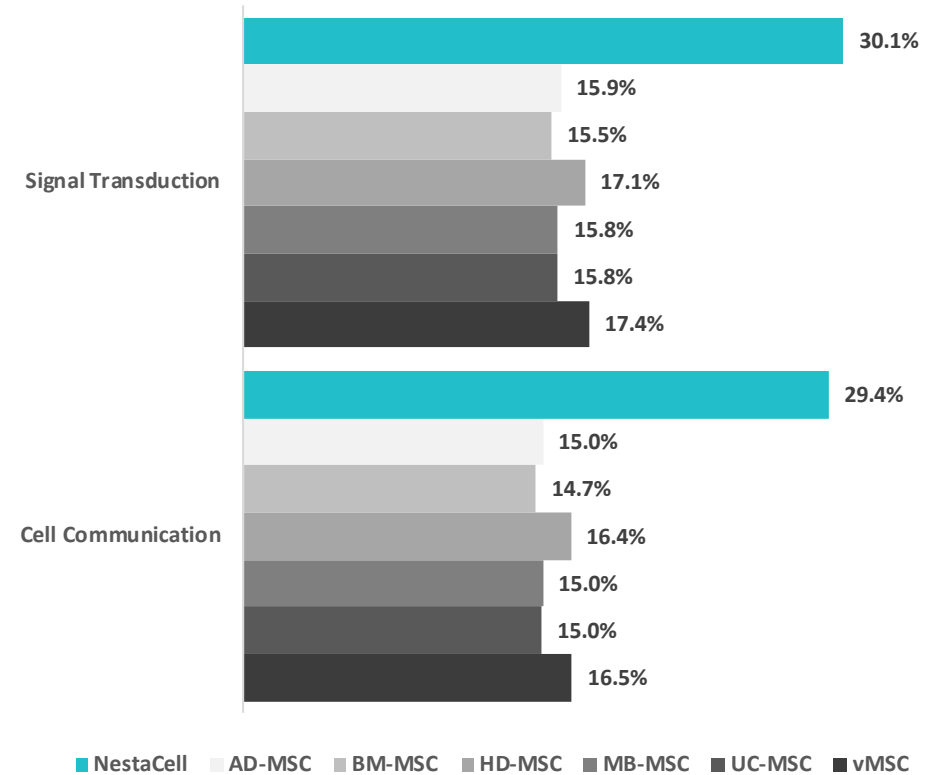
### Introduction to Mesenchymal Stem Cells

- Mesenchymal stem cells (MSCs) can be isolated from various tissues<sup>(1)</sup>
- The exclusion of the “dental pulp” keeps the focus on the tissues that share similar patterns in RNA sequencing
- Studies have demonstrated that these cells exhibit transcriptional signatures that are closely aligned with their tissue of origin

### NestaCell® is a Distinct Type of MSC

- NestaCell®, the human immature dental pulp stem cells (hIDSPSCs) developed by Cellavita show great promise as candidates for cell therapy, particularly in the treatment of neurological diseases
- Cells are isolated from the dental pulp of deciduous teeth through non-invasive procedures
- Cells also demonstrate exceptional in vitro expansion capacity, surpassing that of other mesenchymal stem cells (MSCs)
- Due to their ectomesenchymal origin (neural crest), NestaCell® expresses 375 unique genes not found in other MSCs
- As a result, NestaCell® confers distinctive neuroprotective and neurodegenerative properties
- Additionally, these cells exhibit a significantly higher immunomodulatory potential compared to typical MSCs

## Expression of 2x More mRNAs Enrolled In Cell Communication and Signal Transduction Process





# NestaCell®: A Promising Therapy for the Prevention and Treatment of Neurodegenerative Diseases



Restoration of BDNF, DARPP32, and D2R Expression Following Intravenous Infusion of Human Immature Dental Pulp Stem Cells in Huntington's Disease 3-NP Rat Model  
DOI: 10.3390/cells11101664

*NestaCell® naturally overcomes the challenge of crossing the blood-brain barrier, enabling direct intervention to prevent neuronal apoptosis in regions of progressive degeneration, particularly in the brain's vulnerable areas*

## Mechanism of Action of NestaCell®

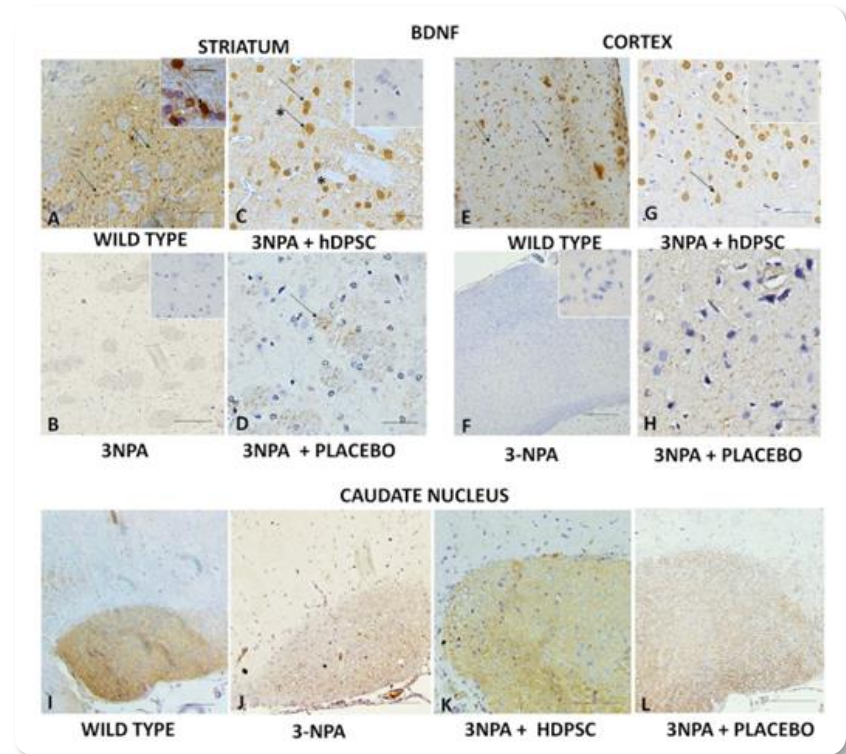
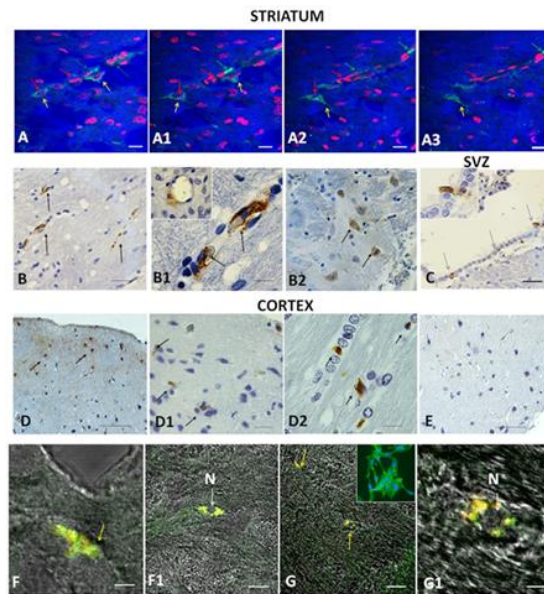


NestaCell® exerts its effects through the secretion of neurotrophins, such as brain-derived neurotrophic factor (BDNF), nestin, and various cytokines, including interleukin-6 (IL-6)



Additionally, it demonstrates potential anti-inflammatory action, characterized by elevated levels of IL-10 and reduced tumor necrosis factor (TNF)

Specific staining (fluorescence) in rodent brain areas correlating to human HD affected areas



NestaCell® is able to migrate and stay into brain areas affected by human HD

Rat models as also showed restoration of BDNF, DARRP32 and D2R expression in rat brain

# Advisory Board

# Years of Academical Experience



Irina Kerkis, PhD

- Is a full professor and the **Director of the Laboratory of Genetics at the Butantan Institute** in São Paulo, Brazil, with extensive expertise in Genetics, **Cell Biology, and Biotechnology**
- Her research focuses on the **isolation and characterization of human dental pulp stem cells**. Dr. Kerkis has made significant contributions through her pre-clinical studies, exploring the potential of these cells in therapeutic strategies for treating neurodegenerative diseases using various animal models
- With a strong commitment to bridging the gap between basic research and clinical applications, she **is at the forefront of advancing regenerative medicine**



Rodrigo Araldi, PhD

- Graduated in Biological Sciences (Bachelor's and Teaching Degree) from UNESP, with a **specialization in Genetics (Viral Oncogenesis) from the Butantan Institute**, and both a master's and doctorate in Biotechnology from USP
- He completed a postdoctoral fellowship in Cancer Molecular Biology at EPM-UNIFESP. With extensive experience in mutagenesis, cancer molecular biology, CRISPR-Cas9 gene editing, oncogenesis, and biotechnology, **his research focuses on molecular mechanisms of epithelial-mesenchymal transition and aims to identify biomarkers for diagnostics, immunotherapies, and exosome-based therapies**
- Currently, he is a professor in Molecular Biology and Business Management in various graduate programs at UNIFESP and serves as co-founder and CEO of BioDecision Analytics Ltda



Joyce Macedo, MD

- Graduated in Medicine from the Faculty of Medicine at the Federal University of Bahia (UFBA), **with a specialization in Epilepsy and Electroencephalogram** from UNIFESP (2009-2011)
- Currently serves as a faculty member in the Health Sciences Education program at Hospital Alemão, focusing on Clinical Research. Professionally, held the position of National Medical Manager of Clinical Research at Aché Laboratories from 2011 to 2014 and then as Senior National Medical Manager of Clinical Research at EMS Laboratories from 2014 to 2017. In 2017, became the Director of the Medical Writing Department at Azidus Brazil CRO
- Has extensive experience as a Principal Investigator in Phase 1, 2, and 3 clinical studies. Presently pursuing a PhD at UNICAMP, **researching magnetic resonance imaging in patients with Spinocerebellar Ataxia Type 3 (SCA3)**



# Advisory Board (Cont'd)

# Years of Academic Experience



Francisco Rotta, MD

- Graduated in Medicine from the Federal University of Rio Grande do Sul (UFRGS), **with specialized training in Neurology and Neuromuscular Medicine** at the University of Miami, FL. Board Certified in Neurology by the American Board of Psychiatry and Neurology (ABPN)
- **Currently engaged in clinical research at Intercoastal Medical Group in Sarasota, FL, and serving as Medical Coordinator at the Paulo Gontijo Institute in São Paulo, Brazil**



Eduardo Pagani, MD

- Has over **20 years of professional experience in drug discovery and development across small molecules, biologics, herbal medicines, and cell therapy**. A graduate of FMUSP (1986) with further training in Pharmaceutical Medicine at UNIFESP (1995), he also holds a master's in Molecular Biology (1995) and a Ph.D. in Pathophysiology (1999) from the same institutions. Dr. Pagani has honed his skills in Good Clinical Practices at the Schering Plough Research Institute in (2002)
- Currently, he is the Medical Writing Director at Azidus Brasil, Medical Director at Cellavita, and a Scientific Consultant at ATME, where he evaluates projects for FDA and EMA submissions
- His previous roles include managing interactions between academia and pharmaceutical companies at LNBio/CNPEM, **focusing on small molecules, monoclonal antibodies, and microfluidic devices for biomedical testing**
- **Served as Medical Manager at Cristália and the Schering-Plough Research Institute, overseeing both pre-clinical and clinical trials**

# Advisory Board (Cont'd)

# Years of Academical Experience



**Marcondes Cavalcante  
França Jr., MD, PhD**

- Marcondes Cavalcante França Jr., MD, PhD is an **Associate Professor in the Department of Neurology at the School of Medical Sciences, UNICAMP**
- He **specializes in neuromuscular diseases, clinical neurophysiology, and neurogenetics, with significant expertise in Amyotrophic Lateral Sclerosis (ALS)**. His research focuses on advancing the understanding and treatment of neuromuscular disorders and genetic neurological conditions, particularly ALS, integrating clinical, neuroimaging, and molecular approaches to improve patient outcomes



**Alexandre Hilário  
Berenguer de Matos**

- PhD in Neuroscience, is a postdoctoral fellow at the School of Medical Sciences, UNICAMP. He **has extensive expertise in Human and Medical Genetics, Molecular Biology, Neurobiology, and Physiology**
- His experience includes gene expression studies in epilepsy models, and he is currently **focused on preclinical trials using human immature dental pulp stem cells (hIDPSC) for Amyotrophic Lateral Sclerosis (ALS)**, aiming to contribute to the understanding and treatment of these conditions



**João Pedro Nunes  
Gonçalves**

- PhD student at the School of Medical Sciences, UNICAMP. **His research focuses on preclinical trials using exosomes from human immature dental pulp stem cells (hIDPSC) for ALS, aiming to explore their therapeutic potential in the disease**

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