CHA BIOTECH

Investor Relations 2020

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Prologue: CHA Medical Group

From Bench (Discovery) to Bed (Clinic):

'Research-focused business model' providing hospital platform through Industry-Academic-Research-Hospital collaboration

▶University

- **Undergraduate School**
  - Life Sciences
  - Health Sciences
  - Nursing
  - Pharmacy
  - Integrated Social Science
- **Graduate School**
  - General
  - Health Industry
  - Integrated Medicine
  - Art Therapy
  - Clinical Pharmacy
  - MBA
  - Sports Medicine
- **Medical School**

▶Research Institute

- CHA Biotech : CHA Stem Cell Institute (CSCI)
- CMG Pharmaceutical : Central Research Institute and Drug Research Institute
- CHA Cares : BIT Research Institute
- CHA F&C : Company Laying Research Institute

▶Corporation

Korea
- CHA Biotech (KOSDAQ)
- CMG Pharmaceutical (KOSDAQ)
- CHA Healthcare
- CHA Meditech
- Seoul CRO
- CHA Cares
- CHA Vaccine Institute
- Solidus Investment
- CHA Bio F&C
- CHA Bio Lab

Japan
- CHA Medical Service (Tokyo)

Taiwan
- CHA IVF(Taiwan) - Branch office

USA
- CHA Biotech USA, Inc. (L.A)
- CHA Health Systems, Inc. (L.A)

Singapore
- CHA Healthcare Singapore Pte, Ltd.
- CHA IVF(Taiwan) Pte, Ltd.

Australia
- CHA SMG Australia Pte, Ltd.
- CHA SMG Australia Holding Pty, Ltd.
- CFC Global Pty, Ltd.

▶General Hospital & Specialty Hospital

- CHA Medical Center (Gangnam, Bundang, Gumi, Ilsan)
- CHA Women's & Children's Medical Center (Bundang, Daegu)
- Research Institute for Women's Health (Gangnam, Seoul Station)
- CHAUM (Chungdam)
- CHAUM Global Stem Cell Clinical Trial Center (Bundang)
- CHA Hollywood Medical Center (L.A)

▶Healthcare Management

- CHA Healthcare Management (L.A)
- CHA Cord Blood Bank, i – Cord
- CHA Public Cord Blood Bank
- Integrated Stem Cell Bank, Bio Insurance
- CHA Paramedic Center

01

CHA BIOTECH

Investor Relations 2016

CHA Biotech at a Glance

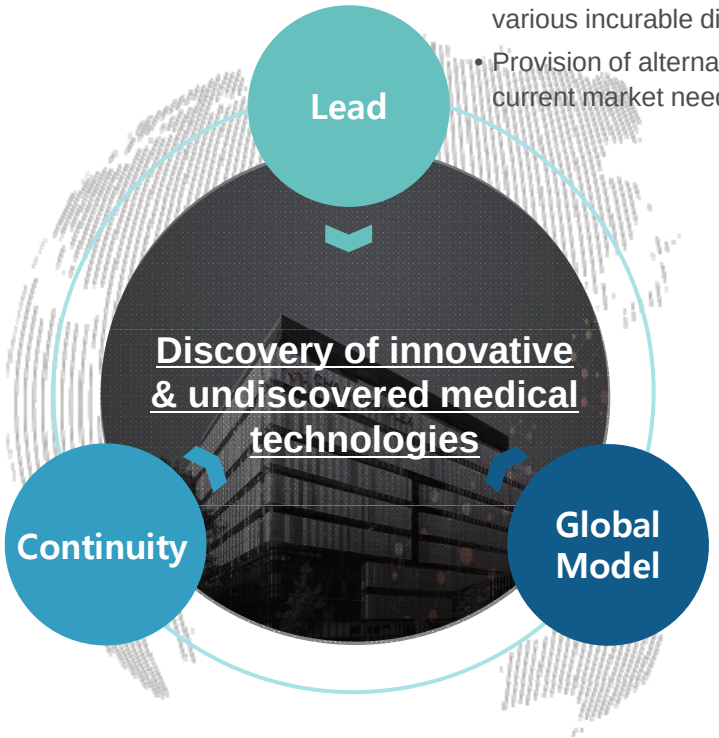
01: Company Overview

“CHA Biotech”, a Leading Biotech company forging a new business paradigm for biotechnology industry

▶ CHA Biotech Profile

Company Name	CHA Biotech Co., Ltd. (KOSDAQ : 085660)
CEO	Sang Hoon Oh
Date Established	Nov. 5th, 2002
Capital(2019)	KRW 26.2 billion
Date Listed on KOSDAQ	Dec. 27th, 2005
Core Business Lines	Cell Therapy Development, Cord Blood & Stem Cell Banking Services, etc.
Offices	(HQ) CHA Bio Complex: 335 Pangyoro, Bundagu, Seongnamsi, Gyeonggido, Korea (Overseas) L.A in US
Website	www.chabio.com

▶ CHA Biotech Vision



- Development of new therapies for various incurable diseases
- Provision of alternative solutions for current market needs

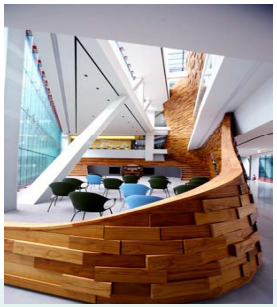
- Ongoing clinical research studies
- Acquisition of source technologies for stem cell therapy development

- Newly focused integrated model combining research institute-bio company-hospital
- Shifting paradigm in healthcare industry

02: CHA Biotech History (1)

2000 ~ 2012

▶ Domestic and global expansion of healthcare services



2002
- Established CHA Diostech
- Opened LA CHA Fertility Center (CHA Biotech)

2004
- Acquired LA Hollywood Medical Center (CHA Biotech)

2005
- Established Mobile Healthcare Unit (CHA Biotech)

2006
- Established CHA Stem Cell Institute

2008
- Jointly founded Stem Cell & Regenerative Medicine International with Astellas in US (formerly,OCATA Therapeutics for development of artificial blood (Boston))

2009
- Entered into global stem cell medi-cluster MOU with Seongnam city
- CHA Biotech reverse merged with Diostech
- Changed company name to CHA Bio&Diostech (CHA Biotech was extinct company)

2010
- Opened future-oriented anti-aging life center, “CHAUM”
- Launched biotechnology cosmetic products “OHUI the first” and “Tervina” in collaboration with LG H&H

2011
- Received approval for opening of cord blood bank (i-cord) from Ministry of Health and Welfare in Korea
- Achieved over 600 cord blood transplant operations (first in Korea)
- Acquired CHA Vaccine Institute (formerly, Dubeel)
- Received Korea’s first Phase I IND approval for treatment of Stargardt Macular Degeneration using hESC-derived RPE cells from MFDS in Korea

2012
- Acquired CMG Pharmaceutical (formerly, Sky New Pharm) (KOSDAQ: 058820)
- Received Korea’s first Phase I/IIa IND approval for treatment of Age-related Macular Degeneration using hESC-derived RPE cells from MFDS in Korea
- First patient enrolled in Phase I/IIa clinical trial of Age-relate Macular Degeneration

2013 ~ 2014

▶ Revved up ‘Selection and Concentration’ strategy after spin-off

▶ Consolidated into one through intimate integration with hospitals, medical schools and venture companies

2013
- Received Global Phase II IND approval for PLX_PAD treatment of Intermittent Claudication from MFDS in Korea
- First patient enrolled in Phase1 clinical trial of hESC-RPE cell therapy for Stargardt Macular Degeneration
- Physical Division
  - CHA Healthcare: Hospital operation business
  - CHA Meditech: Bio development business

2014
- Received Korea’s first Phase I/IIa IND approval for CordSTEM treatment of Stroke from MFDS in Korea
- Completed injection of hESC-derived RPE cells to Stargardt Macular Degeneration patients in Phase I clinical trial
- hESC-derived RPE cell therapy for Stargardt Macular Degeneration received Orphan Drug Designation (first in Korea)
- Equity Spin-off
  - CHA Diostech: Optical Business (KOSDAQ : 196450)
- Changed company name to CHA Biotech

02: CHA Biotech History (2)

2015 ~
▶ First year of being a specialized biotechnology company

2015
- Received Phase I/IIa IND approval for PlaSTEM therapy of Alzheimer's Disease from MFDS in Korea
- Completed Phase I Stargardt Macular Degeneration clinical trial

2016
- Received Phase I/IIa IND approval for CordSTEM therapy of Disk Degeneration from MFDS in Korea
- Received Certificate of Venture Enterprise

2017
- Completed injection of PLX-PAD therapy to IC patients in global Phase II clinical trial
- Received Phase I/IIa IND approval for CordSTEM therapy of Cartilage Defect from MFDS in Korea
- Completed injection of CordSTEM therapy to Stroke patients in Phase I/IIa clinical trial

2018
- Young Wook Lee appointed as Co-CEO
- Completed Phase I/IIa trial for stroke and Korean Phase II IC trial
- Jae Hoon Song appointed as Chairman of CHA Bio Group and CHA Biotech
- Acquisition of profit-making businesses from subsidiaries and affiliate 2 (Businesses of Bio-based raw materials, IT and Sales for group employees)
- Jong Sung Choi appointed as Co-CEO
- Physical Division : CHA Bio Lab(Contract drug manufacturing and basic research business)

2019
- Sang Hoon Oh appointed as new CEO
- Sold stake in US Subsidiary(Stem Cell & Regenerative Medicine International, Inc.)

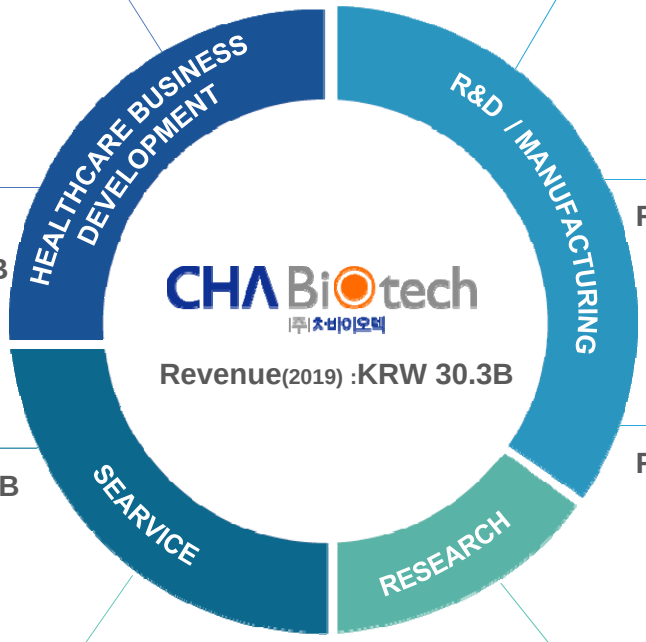
2020
- Received Phase I/IIa IND approval for CordSTEM-DD(Disk Degeneration)
- Filed IND application with MFDS for phase I study of CBT101-Solid Cancer

CHA Bio Complex **Korea's Largest Bio Research Center** Location : Pangyo techno valley, Floor space : 66,116㎡ (Building site : 10,248㎡),
2 separate buildings for research and office with 5 stories in basement level and 7 stories in ground level

Mecca for Biotechnology & Clinical Research
- World-class biomedical research institute
- Fully equipped with preclinical trial center, GMP facilities, and cancer research institute, stem cell institute, anti-aging institute, infertility and reproductive medicine center, new drug development center, etc.

One & Only Global Medical Cluster in Korea
- Pursuing all healthcare procedures between education, research, development and preclinical trial under one cluster
- Global stem cell medi-cluster providing optimal environment for development of stem cell technologies

CHA Biotech: Total Healthcare Solution Provider



Venture Capital

SOLIDUS INVESTMENT

Revenue(2019) : KRW 10B

Global Hospital Investment & Operation

CHA Healthcare

Revenue(2019) : KRW 384.9B

Clinical Research Organization

SEOUL CRO

Revenue(2019) : KRW 6B

Healthcare Service Provider

CHA CARES

Revenue(2019) : KRW 36.8B

NK Cell Therapeutics, CDMO

Revenue(2019) : KRW 0.4B

CHA Biolab

General and Specialty Pharmaceuticals

Revenue(2019) : KRW 58.6B

CMG제약

Medical Device (Dermal Filler)

Revenue(2019) : KRW 13B

CHA MEDITECH

3rd Generation Vaccine Development

Revenue(2019) : KRW 0.1B

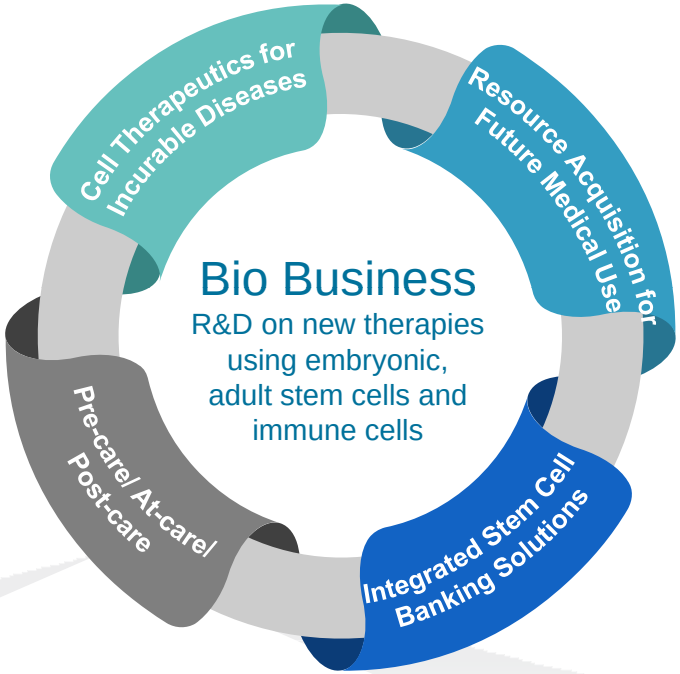
CHA Vaccine Institute

04: Business Portfolio

Total Solution Provider Offering Comprehensive Services of future-oriented Stem Cell Business

Cell Therapeutics Business

Expediting pipeline commercialization and continuous discovery of potential candidates for in-and out-licensing



Cord Blood Business

No.1 cord blood bank, 'i-cord'

Bio Insurance Business

High quality and custom-tailored banking service

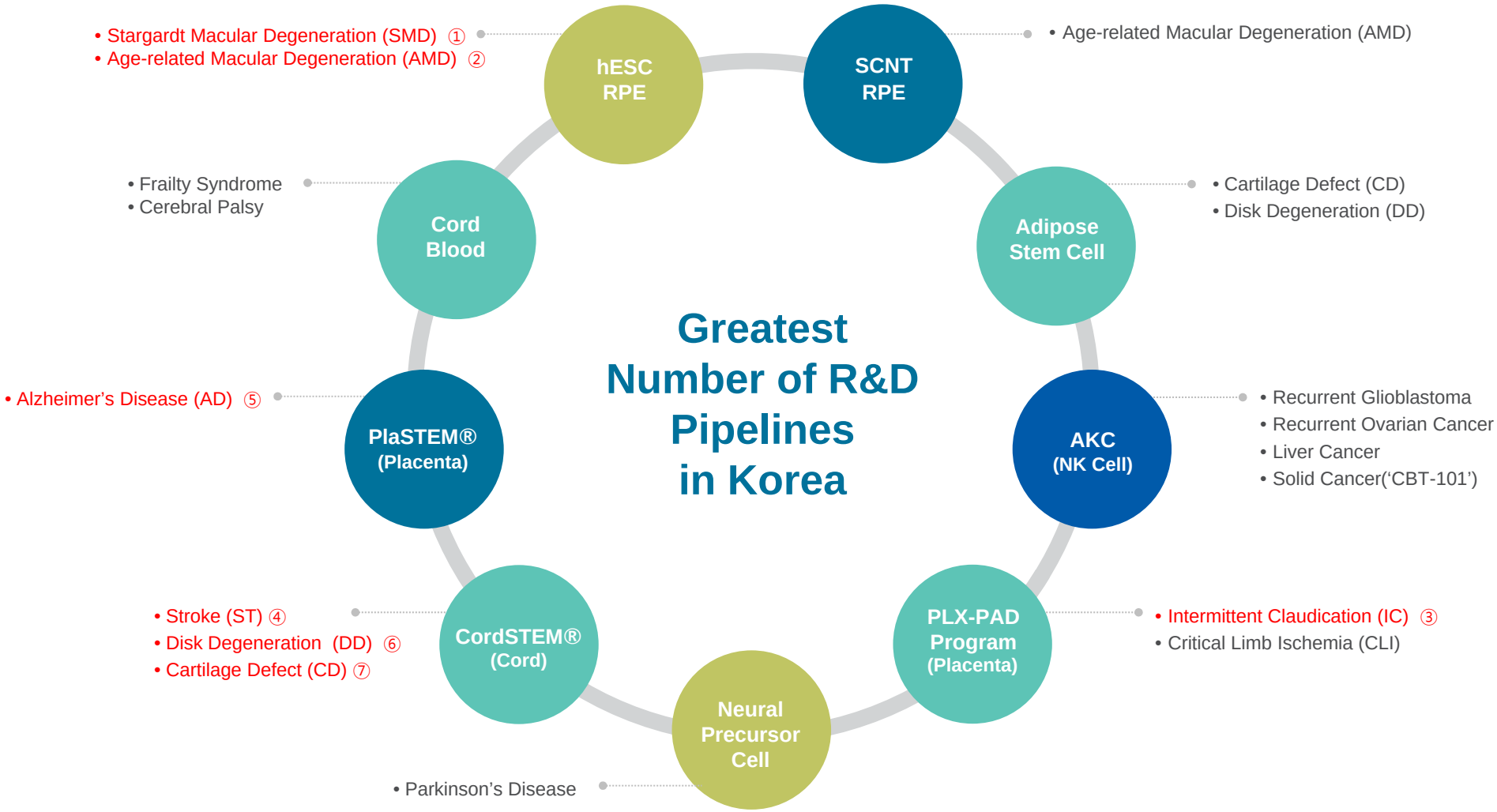
CHAUM Business (Non-medical)

Advanced concept of personalized healthcare business through provision of differentiated anti-aging service and preventive healthcare service

Other Businesses

- Bio-based raw materials business
- Hospital IT business
- Sales business for group employees

05: R&D Pipeline Overview _by cell lines



05: R&D Pipeline Overview _by indications

SMD /AMD

hESC RPE SIT

SCNT RPE IIT

- Phase I completed for SMD
- Phase I / IIa ongoing for AMD
- IIT ongoing for SCNT AMD

Disc Degeneration

Adipose Stem Cell IIT

- IIT: Completed

CordSTEM®(Cord) SIT

- SIT: IND approval

Cartilage Defect

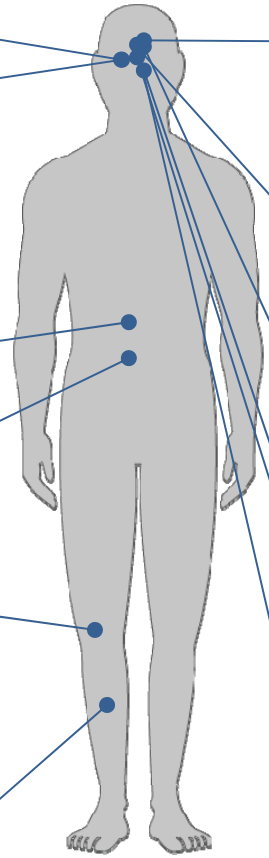
CordSTEM®(Cord) SIT

- SIT: IND approval (2016)

Intermittent Claudication

PLX-PAD (Placenta) SIT

- Global Phase II completed (US, EU, Israel, Korea)



Parkinson's Disease

IIT **Fetal NPC**

- IIT: Currently Ongoing

Cerebral Palsy

IIT **Cord Blood**

- IIT : Completed

Alzheimer's Disease

SIT **PlaSTEM®(Placenta)**

- Phase I /IIa: Currently ongoing

AKC®(Autologous NK Cell)

IIT **Recurrent GBM**

- IIT : Completed

SIT **Solid Cancer**

- Phase I : IND application Filed

Stroke

SIT **CordSTEM®(Cord)**

- Phase I / IIa: Completed

02

Bio Business

A: CHA Biotech Core Competencies

Limitations of Existing Cell Therapy Products

01 Live type formulation

- (Dendreon)
  Invested on manufacturing facilities all over US
- Expiration date of general cell therapy products:
  within 8 hours to 48 hours

02 High treatment cost

- (Provenge)
  3-step treatment cost: US$ 93,000
- (Immunotherapy)
  US $ 3,500 per injection

03 Low remedial value

- (Provenge)
  Life expectancy increased only for 4 months
- (Immunotherapy)
  Prevention of cancer recurrence and metastasis rather than cure

CHA Biotech Core Competencies

Mass culture technology

- Keeping stem cells in undifferentiated state by cultivating under hypoxic conditions
- Proprietary technique of mass production of cells up to 10^13 cells donated from placenta/ umbilical cord tissue
- Low-cost and high-efficiency cell therapy products

No. 1 cell cryopreservation technique

- Widely recognized as world's best cell cryopreservation technique and quality control knowhow
  (World's first human oocyte cryopreservation/ vitrification (1998))
- Manufactured cell therapy product lasting for 12 to 36 months (off-the-shelf formulation)

Greatest number of cell therapy pipeline in Korea

- Retention of various types of stem cells including embryonic and adult stem cells, neural precursor cell and immune cell
- Securing unique knowhow in optimizing cell line selection for each indication

Global research network and meaningful research accomplishments

- Accumulated abundant clinical experiences and laboratory investigations
- Strategic collaborations with global stem cell development companies
  - Astellas in US(formerly, OCATA Therapeutics)
  - Pluristem Therapeutics in Israel

B: Pluripotent Stem Cell Based Pipeline

Current Development Status of Pluripotent Stem Cell Based Therapeutics

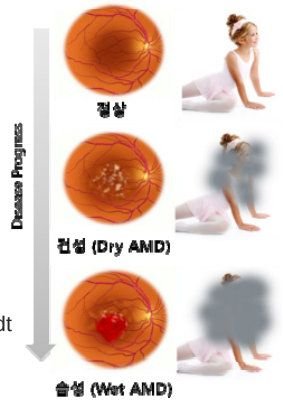
Product	Indication	Research	Pre-Clinical	Phase Ⅰ	Phase Ⅱ	Phase Ⅲ	Remarks
Embryonic Stem Cell-derived Retinal Pigment Epithelium Cell (hESC-RPE)	Stargardt Macular Degeneration (SMD)	Strategic Partnership with Astellas in US (formerly, OCATA Therapeutics) →					Phase II in preparation
	Age-related Macular Degeneration (AMD)	Strategic Partnership with Astellas in US (formerly, OCATA Therapeutics) ⇢					Phase I/IIa ongoing (4 Cohorts: 50,000/100,000/150,000/200,000 cells) (3 multi-sites)
Somatic Cell Nuclear Transfer derived Retinal Pigment Epithelium Cell (SCNT-RPE)	Age-related Macular Degeneration (AMD)	→					IIT(Investigator Initiated Trial) ongoing

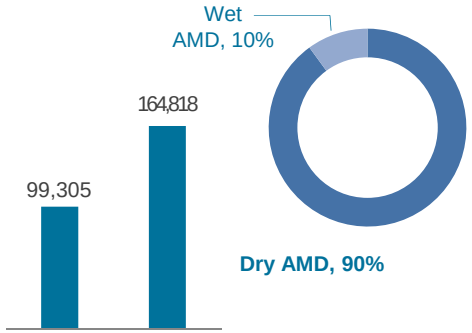
B: Pluripotent Stem Cell Based Pipeline

Aiming to Commercialize Eye Disease Therapy through Korea's 1st Human Embryonic Stem Cell Clinical Trial

▶ Macular Degeneration

- Vision loss due to degeneration of macular, a part of retina responsible for detailed vision and central vision
- Blindness and visual impairment in adults over age 50 (Age-related Macular Degeneration)
- Juvenile macular degeneration due to gene mutation (Stargardt Macular Degeneration)
- Age onset decreased and number of patients increased due to population aging





▶ Current Therapy

- Dry AMD : No treatment
- Wet AMD : 2 kinds of products

Lucentis	Eyelea
Launched in 2014	Launched in 2013
Sales: US $ 4 billion	Sales: US $ 2 billion

▶ Limitation of Current Treatment

- Angiogenesis agent that can only delays progression of disease
- No radical treatment for improvement in function of degenerated macular

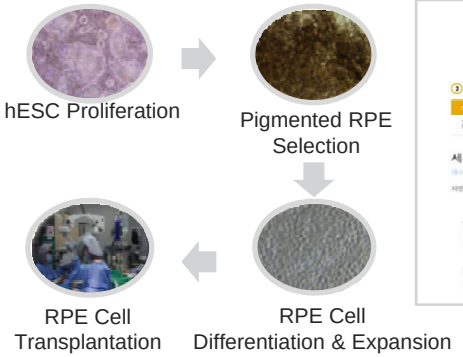
- Global AMD therapy market :
  (2017) USD 7.2 billion → (2023E) USD 11.2 billion
- Local AMD patients increased by an average of 16.5% per year
  (2013) 99,305 patients → (2017) 164,818 patients
- Sourced from Health Insurance Review & Assessment Service and Global AMD Market till 2023 by Bharat Book Bureau

▶ CHA Biotech's MA09-hRPE*

- Phase I/IIa clinical trial for dry AMD ongoing
- Phase I clinical trial for SMD completed
- Announced world's 1st hESC-derived RPE follow up safety trial results (Jun,2015)
- hESC-RPE: License acquired from Astellas in US (formerly, OCATA Therapeutics)

Development Status

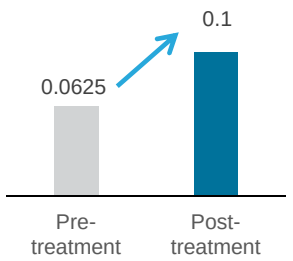
hESC-derived RPE Manufacturing Process Scheme



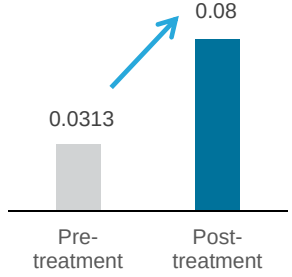
Media Reports on hESC-derived RPE Clinical Trial Results

[Visual Acuity Improvement after hESC-RPE Cell Injection]

AMD Patients 1.6 times Vision Improvement



SMD Patients 2.6 times Vision Improvement



B: Pluripotent Stem Cell Based Pipeline

Treatment of Macular Degeneration using Embryonic Stem Cell-derived Retinal Pigment Epithelium: Preliminary Results in Asian Patients (May 1, 2015)

Timeline	AMD Patient 1		AMD Patient 2		SMD Patient 1		SMD Patient 2	
	BCVA	ETDRS (# of Letters)	BCVA	ETDRS (# of Letters)	BCVA	ETDRS (# of Letters)	BCVA	ETDRS (# of Letters)
Baseline	**CF4ft**	**1**	**20/320**	**25**	**CF2ft**	**1**	**20/640**	**13**
4 weeks	CF4ft	3	20/250	33	CF2ft	5	20/250	29
8 weeks	CF4ft	2	20/200	35	20/640	10	20/200	32
13 weeks	CF4ft	2	20/250	33	20/800	10	20/200	34
26 weeks	CF4ft	3	20/250	35	20/640	12	20/250	35
1 year	**CF4ft**	**2**	**20/200**	**34**	**20/640**	**13**	**20/250**	**32**
2 year	20/800	9	20/160	39	20/640	11	20/200	33
3 year	20/500	18	20/200	38	20/640	10	**20/200**	**32**
4 year	**20/500**	**17**	**20/200**	**37**	**20/640**	**10**	NA	NA

※**Reference** : Stem Cell Reports. (http://www.sciencedirect.com/science/article/pii/S2213671115001058)
- Treatment of Macular Degeneration Using Embryonic Stem Cell-Derived Retinal Pigment Epithelium: Preliminary Results in Asian Patients

C: Adult Stem Cell Based Pipeline (1)

Current Development Status of PLX_PAD Cell Therapeutics

Product	Indication	Research	Pre-Clinical	Phase Ⅰ	Phase Ⅱ	Phase Ⅲ	Remarks
PLX-PAD (Placenta derived Adherent Stromal Cells)	Intermittent Claudication (IC)	Global Partner: Pluristem Therapeutics in Israel →					Phase II completed (Global clinical trial, 2018.04) ※ CHA Biotech & Pluristem Therapeutics 21 patients (Korea) 151 patients (Israel, US & EU) 172/172 patients treated
	Critical Limb Ischemia (CLI)	Global Partner: Pluristem Therapeutics in Israel →					Phase III ongoing 246 patients (US and EU) ※ Pluristem Therapeutics

C: Adult Stem Cell Based Pipeline (1)

Peripheral Arterial Disease Therapy using Angiogenesis in PLX-PAD cells

▶ Peripheral Arterial Disease (PAD)

- Symptom vary from muscle pain when walking or using affected muscles (Intermittent Claudication, IC) to rest pain (Critical Limb Ischemia, CLI)
- Leading to chronic severe reduction in quality of life
- If untreated, tissue necrosis caused by lack of blood flow in blocked blood vessel
- Narrowed and blocked blood vessel mainly due to hardening of arteries

Waking Difficulty due to Pain

Tissue Necrosis due to Blocked Blood Vessel

▶ Current Therapy

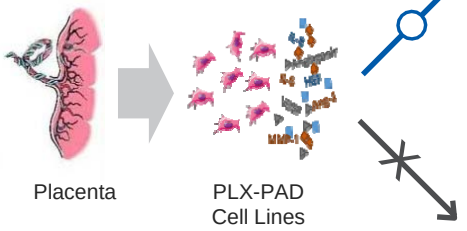
- Drug medications to improve blood circulation, angioplasty, bypass graft, and etc.

▶ Limitation of Current Treatment

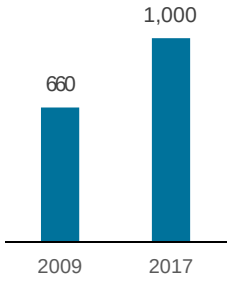
- No regeneration in damaged blood vessels caused by lack of blood flow

▶ CHA Biotech's PLX-PAD

- Placenta-derived cell therapy product which has functions of secreting EGF (Epidermal Growth Factor) and VEGF (Vascular Endothelial Growth Factor)
- Korean market exclusivity acquired via strategic partnership with Pluristem Therapeutics in Israel (2013)



Efficacy of PLX-PAD identified (Blood flow improved in preclinical animal studies, sourced from Pluristem Therapeutics)



Global PAD therapy market (USD million)

- PAD patients in the world : 200 million patients
- 1/3 with Intermittent Claudication
- Approx. 14 million patients in the US, representing a cost of approx. USD 2.5 billion annually to the National Health Care System
- Sourced from National Center for Biotechnology Information, U.S National Library of Medicine

Current Status of Global Development

- Intermittent Claudication (IC) : Phase II clinical trial completed in multiple countries (US, Israel, Europe, Korea)
  ※CHA Biotech & Pluristem Therapeutics
- Critical Limb Ischemia (CLI) : Phase III clinical trial ongoing(US and Europe)
  ※Pluristem Therapeutics

C: Adult Stem Cell Based Pipeline (2)

Current Development Status of CordSTEM® Therapeutics

Product	Indication	Research	Pre-Clinical	Phase Ⅰ	Phase Ⅱ	Phase Ⅲ	Remarks
CordSTEM® (Umbilical Cord Adherent Stem Cells)	Stroke (ST)	1st In-house Pipeline →					Phase I/IIa completed (Korea's first double-blind test) 19 out of 19 patients treated (at Bundang CHA Medical Center) Phase II in preparation
	Disk Degeneration (DD)	3rd In-house Pipeline →					Phase I/IIa IND approved from MFDS(2020.07.15)
	Cartilage Defect (CD)	4th In-house Pipeline →					Phase I IND approved from MFDS

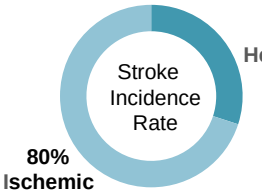
C: Adult Stem Cell Based Pipeline (2)

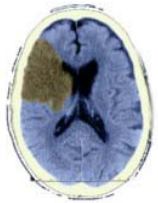
Cerebral Infarction Therapy using CordSTEM®

▶ Stroke

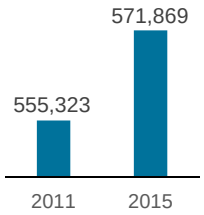
- Disease causing brain necrosis due to disturbance in blood vessel supplying blood to brain
- Associated wit h high mortality rate or survival with severe neurological deficits

Vascular Blockage

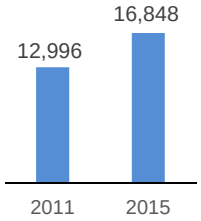




Brain Tissue Necrosis



Stroke Patients in Korea



Stroke Medical Expenses in Korea (KRW 100million)

▶ Current Therapy

- Current guideline recommends administration of tPA within 4.5 hours of onset of stroke symptoms
- Intravenous injection (only applicable to 5% of patients)
  tPA*: tissue Plasminogen Activator

Global sales of Actilyse in 2011 (Gene recombination, tPA): ~ KRW 600 billion

▶ Limitation of Current Treatment

- tPA efficacy expected only when administration within 4.5 hours
- Risk of additional cerebral hemorrhage
- No hope for recovery of already damaged brain functions

▶ CHA Biotech's CordSTEM®

- Mesenchymal stem cell therapy derived from umbilical cord tissue
- Stored frozen and injectable immediately since no cultivation period require
- Co-development with CHA University and Bundang CHA Medical Center

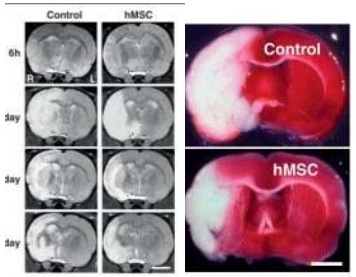
Extracted from Umbilical cord placenta

Isolation, blood vessel removal and enzyme digestion

Cell expansion

Finished product (stored frozen)

Efficacy of MSC Therapy Identified in Preclinical Studies



Trends in molecular medicine (Volume 18, Issue 5, May 2012)

Development Status

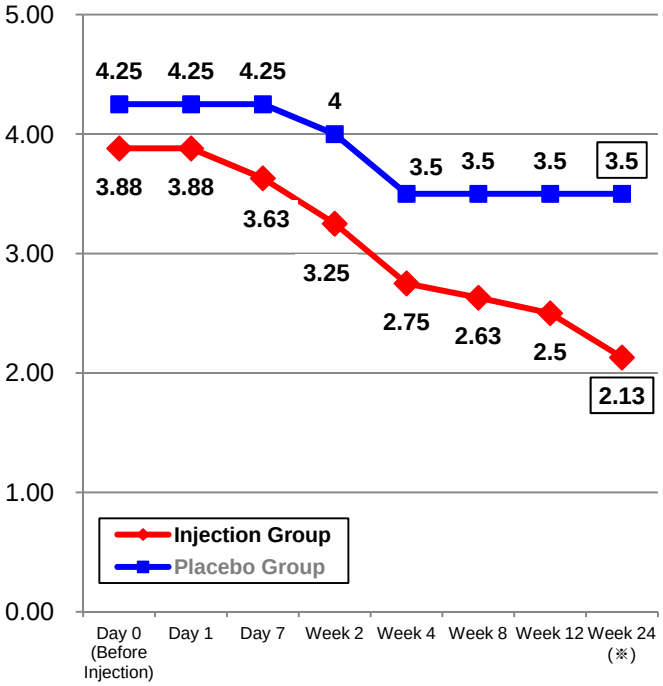
- Received MFDS approval for acute stroke clinical trial
- Phase I/IIa clinical trial completed in Korea (Bundang CHA Medical Center, Dr. Oak Jun Kim)
- Phase II clinical study in preparation

- Local acute stroke patients (2015) : approx. 570,000 patients, CAGR('11~'15) : 1.3%
  Local medical expenses (2015) : approx. 1,680 billion, CAGR('11~'15) : 6.7%
- Global stroke therapy market : (2014) KRW 2,300 billion → (2030E) KRW 6,800 billion
- Sourced from Health Insurance Review & Assessment Service(2016), Global Health Data, Korea Brain Research Institute

C: Adult Stem Cell Based Pipeline (2)

Demonstrated robust safety profile for 'CordSTEM-ST' via systemic administration
Signals of efficacy seen with statistical significance at week 24 during review time period

mRS response rate over time (Efficacy Assessment) - Phase Ⅰ/Ⅱa

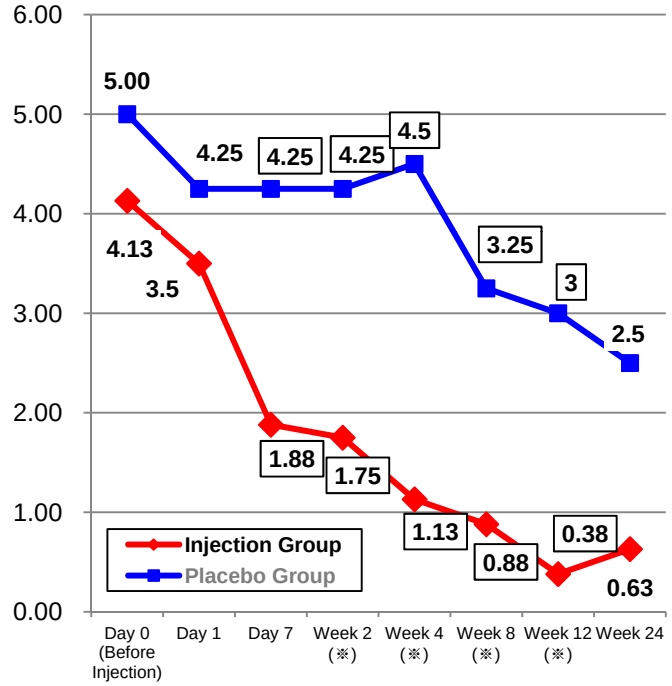


[Among the 1st efficacy assessment]

Analysis of mRS(modified Rankin Scale) scores

- At week 24, a statistically significant decrease in mRS scores was observed in 'Cordstem-ST' treatment group compared with the placebo group.
- mRS is a measure of post-stroke disability, with higher scores indicating worse disability and 6 indicating death.

NIHSS response rate over time (Efficacy Assessment) - Phase Ⅰ/Ⅱa

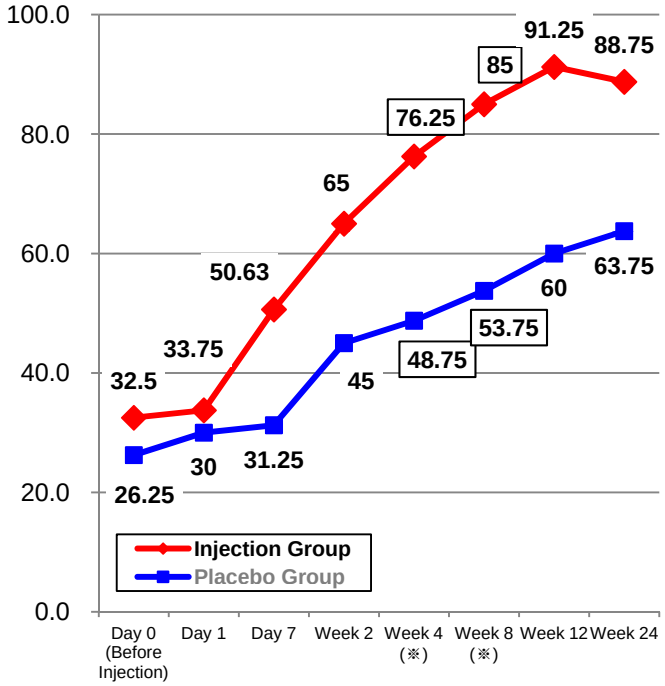


[Among the 2nd efficacy assessment]

Analysis of NIHSS (National Institute of Health Stroke Scale) scores

- A statistically significant difference was observed in 'Cordstem-ST' treatment group in certain periods (Week2, Week 4, Week8, Week 12) compared with the placebo group.
- NIHSS is a systematic assessment tool that provides a quantitative measure of stroke-related neurologic deficit.

BI response rate over time (Efficacy Assessment) - Phase Ⅰ/Ⅱa



[Among the 2nd efficacy assessment]

Analysis of BI(Barthel Index) scores

- A statistically significant difference was observed in 'Cordstem-ST' treatment group in certain periods (Week 4, Week8) compared with the placebo group.
- BI is a measure of performance in activities of daily living, with higher scores indicating higher levels of independency.

C: Adult Stem Cell Based Pipeline (3)

Current Development Status of PlaSTEM® Therapeutics

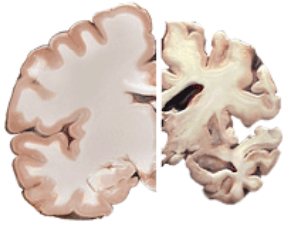
Product	Indication	Research	Pre-Clinical	Phase Ⅰ	Phase Ⅱ	Phase Ⅲ	Remarks
PlaSTEM® (Placenta derived Stem Cells)	Alzheimer's Disease (AD)	2nd In-house Pipeline →					Phase I/IIa ongoing

C: Adult Stem Cell Based Pipeline (3)

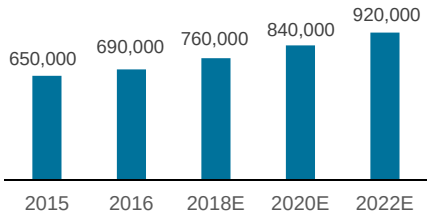
Alzheimer's Disease Therapy using PlaSTEM® Program

▶ Alzheimer's Disease

- No definitive cause and mechanism of AD found
- Associated with severe memory problems and other intellectual disabilities to varying degrees, ultimately leading to death



Healthy Brain | Severe AD



Dementia Patients in Korea (Elderly patients over age 65)

- Alzheimer's disease patients in the world : (2014) approx. 7.9 million patients → (2021E) approx. 9 million patients + approx. 36 million patients with minor cognitive impairment
- 71.3 % with Alzheimer's Disease
- Local Alzheimer's Disease therapy market increased by an average of 8% per year (approx. KRW 216 billion in 2016 based on insurance claim payment)
- Sourced from Ministry of Health and Welfare(2013)

▶ Current Therapy

- 2 kinds of FDA-approved drugs
- **Actylcholinesterase Inhibitor**

Articept Tab.

Exelon Cap.

Remnyl Pr Sr Cap.

- **NMDA Receptor Antagonist**

Ebixa Tab.

▶ Limitation of Current Treatment

- No definite results identified to prevent or delay onset of AD from 2 FDA-approved drugs

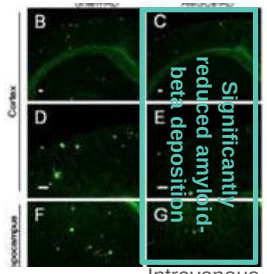
▶ CHA Biotech's PlaSTEM®

- Mesenchymal stem cell therapy derived from umbilical tissue
- Stored frozen and injectable immediately since no cultivation period required
- Co-development with CHA University and Bundang CHA Medical Center

Extracted from Umbilical cord placenta | Isolation, blood vessel removal and enzyme digestion | Cell expansion | Finished product (stored frozen)

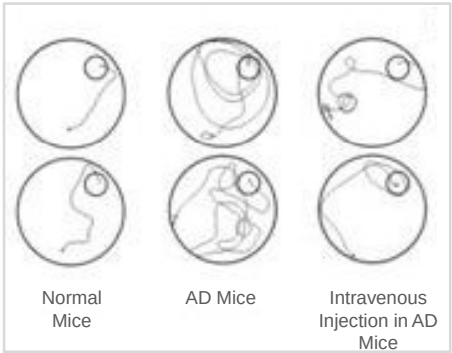
Efficacy of MSC Therapy (Pre-clinical Animal Studies)

Neurobiology of Aging (April, 2013, CHA University, Dr. Ji Sook Moon)



AD Mice | Intravenous Injection in AD Mice

Improved Cognitive Function in Mice (Water Maze Test)



Normal Mice | AD Mice | Intravenous Injection in AD Mice

Development Status

- Received MFDS approval for Alzheimer's disease clinical trial
- Phase I/IIa clinical trial ongoing (Bundang CHA Medical Center, Dr. Hyun Sook Kim)

C: Adult Stem Cell Based Pipeline (4)

Current Development Status of Fetal NPC and Adipocyte derived MSC Therapeutics

Product	Indication	Research	Pre-Clinical	IIT*	Phase Ⅰ	Phase Ⅱ	Phase Ⅲ	Remarks
Fetal NPC (Neural Precursor Cells)	Parkinson's Disease	→	→	→				IIT ongoing 15 out of 15 patients treated
Adipocyte derived MSC (Mesenchymal Stem Cells)	Disk Degeneration	→	→	→				IIT completed in 2016 10 out of 10 patients treated IIT IND approved from MFDS in 2017

*Investigator-Initiated Trial

D: Immune Cell Based Pipeline

Current Development Status of Immune Cell Based Therapeutics

Product	Indication	Research	Pre-Clinical	Phase Ⅰ	Phase Ⅱ	Phase Ⅲ	Remarks
Autologous Killer Cell (AKC®)	Solid Cancer						Phase I IND filed in 2020.04.27 ('CBT-101')
	Recurrent Glioblastoma						IIT (Investigator-Initiated Trial) completed
	Liver Cancer						Received IIT (Investigator-Initiated Trial) approval from MFDS in Korea
	Recurrent Ovarian Cancer						IIT (Investigator-Initiated Trial)
	Inflammatory Disease						

D: Immune Cell Based Pipeline

Cancer Immunotherapy using Autologous Killer Cell

▶ Recurrent Glioblastoma

- Incidence rate: 2-3 out of 100,000 people (North America and EU)
  : 50% of people die within 1 year after diagnosis
  : 90% of people die within 3 years after diagnosis

▶ Current Treatment Method

- Existing therapies: Surgical operation, chemotherapy and radiotherapy
- No radical treatment existed including targeted therapy for recurrent glioblastoma

▶ Liver Cancer

- WHO statistical results (2012)
  - 2nd highest cause of cancer deaths
  - 746,000 people died due to liver cancer in 2012
- Monthly cost of medicine in Korea: over $2,300 (2013)

▶ Current Treatment Method

- Surgical operation, TACE (Transarterial Chemoembolization), chemotherapy and radiotherapy
- Combination with targeted therapy (Sofafenib (Nexavar)®

Nexavar®
- Global sales in 2012: $ 1.1 billion

▶ Limitation of Current Treatment

- Life expectancy increased only for 3 months compared to control group
- Fatigue, diarrhea, rash, swelling in hands and feet, pain and skin peeling experienced by 30% of patients administrating Sorafenib

▶ Recurrent Ovarian Cancer

- US statistical results (2008 ~2012)
  - Newly diagnosed patients per year: 12.1 out of 100,000people
  - Death rate per year: 7.7 out of 100,000 people
  - Number of patients in 2012: 192,000 patients
  - 5-year survival rate after diagnosis: 45.6% (2005 ~ 2011)

▶ Current Treatment Method

- Surgical operation, TACE (Transarterial Chemoembolization), chemotherapy and radiotherapy
- Combination with hormone therapy and targeted therapy(Avastin)®

Avastin®
- Angiogenesis inhibitor for tumor growth delay (applicable to 6types of tumor types)
- Global sales per year: $ 6 billion

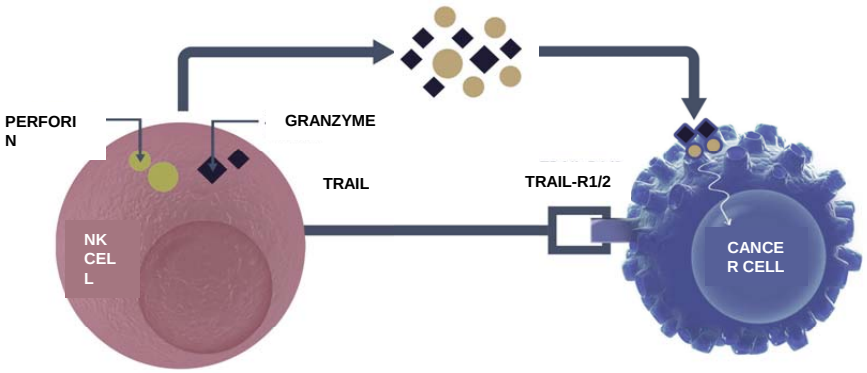
▶ Limitation of Current Treatment

- Effective at reducing size of tumor and tumor growth del ay upon combination with chemotherapy
- Difficult to extend life expectancy

(Reference: www.cancer.org)

D: Immune Cell Based Pipeline

Anti-cancer Immunotherapy (AKC® : Autologous Killer Cell)



01 Next generation NK cell therapy, “AKC® Immunotherapy”

▶ NK cells kill cancer cells by secreting perforins and granzymes. Upon contact with cancer cells, perforin creates holes in the target cell membrane and granzymes move into target cell to initiate apoptotic process

02 Proprietary high-level NK cell cultivation technique

▶ Increased NK activity (capability of NK cells to kill cancer cells) by culturing highly active NK cells rather than culturing T cells which are relatively involved in mass culture

▶ No toxicity observed in GLP toxicology testing (repeated dose toxicity studies)

03 Found anti-cancer effect on various solid cancers

▶ AKC Immunotherapy contains 20 times more perforins and TRAIL and 4.2 times more granzyme B

▶ High treatment ability to kill cancer cells when compared to pre-cultivation stage

▶ Overview of immune-cell therapy against cancer

- Treatment procedure of immuno-cell therapy: a cycle of “blood collection”, “cell cultivation and proliferation” and “infusion”
- Applicable to various types of cancers
- Anticancer immune cell therapy well known in Japan

▶ Status of AKC Investigator-Initiated Trial (IIT)

Indication	# of patients in IIT
Recurrent Glioblastoma	23
Recurrent Ovarian Cancer	6

▶ Principal investigators of AKC IIT

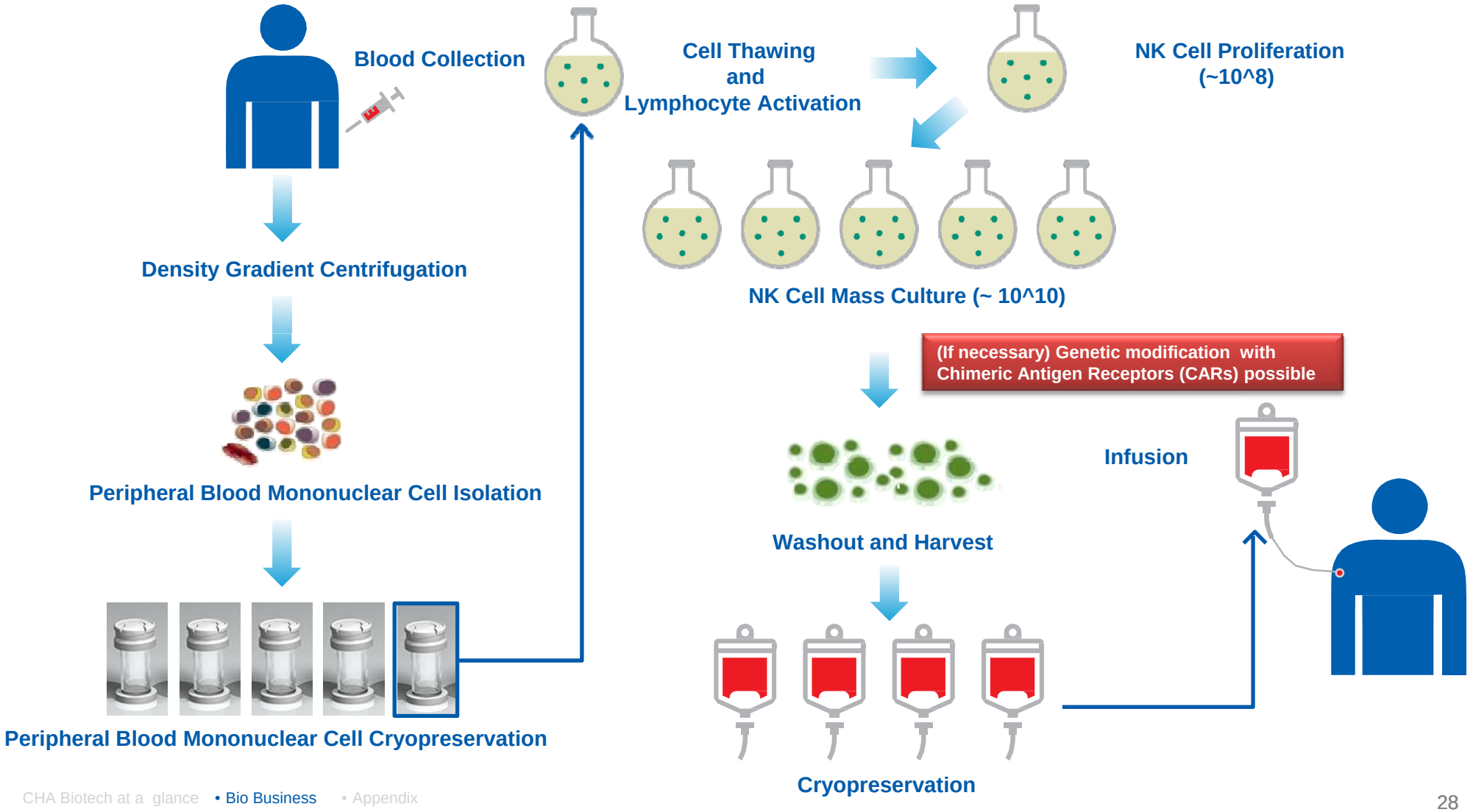
Dr. Kyeong Gi Cho
(Recurrent Glioblastoma)

Dr, Won Duck Joo
(Recurrent Ovarian Cancer)

· Reference :
http://bundang.chamc.co.kr/

D: Immune Cell Based Pipeline

Ongoing Research: Peripheral Blood Mononuclear Cell Isolation and Final Product Cryopreservation



02

Bio Business

01. Cell Therapeutics Business

02. Cord Blood Business

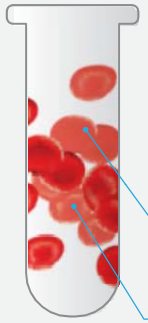
03. Bio Insurance Business

04. CHAUM Business

Ongoing Research on Cord Blood-based Therapeutics for Treating Incurable Diseases through Cord Blood Banking

▶ Umbilical Cord Blood

Cord Blood



Blood that remains in attached umbilical cord after childbirth

- Genetically identical to newborn baby
- First-line treatment for many of today's incurable diseases
- Risk of immune rejection upon transplantation ▼
- Treatment results ▲

Hematopoietic Stem Cell — Cells isolated from blood that can renew itself

Mesenchymal Stem Cell — Cells differentiated to form adipocytes, bones, muscles, and nerves

▶ Current Curable Diseases

Cancer
Leukemia, Myelodysplastic Syndrome, Multiple Myeloma, Solid Cancer Neuroblastoma, Testis Cancer, etc.

Genetic Metabolic Disorder
Gaucher's Disease, Congenital Immunodeficiency Syndrome, Hunter Syndrome, etc.

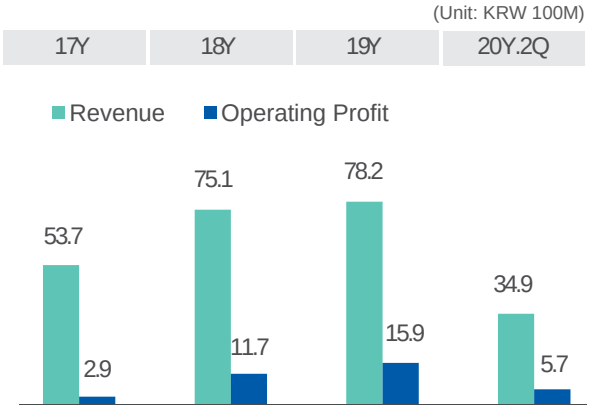
Hematologic Disease
Aplastic Anemia, Sickle Cell Anemia, Evan Syndrome, Congenital Cytopenia, etc.

Autoimmune Disease
Rheumatism, Systemic Lupus Erythematosus, etc.

Immune Deficiency
ADA Enzyme Deficiency, Chronic Granulomatous Disease, Severe Combined Immunodeficiency, Wiskott-Aldrich Syndrome, etc.

▶ Current Status of Cord Blood Business

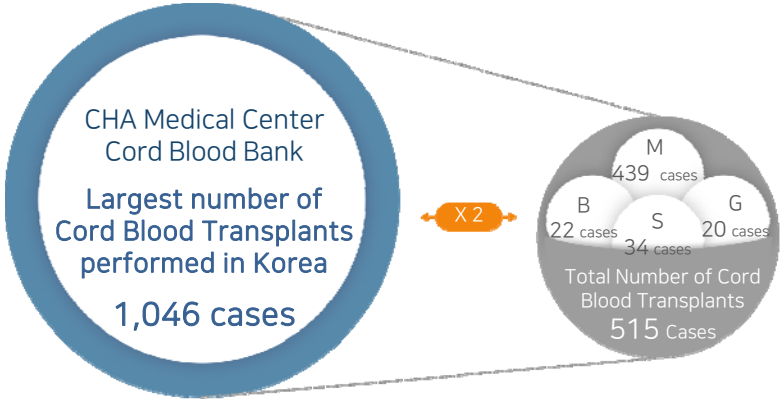
(Unit: KRW 100M)



- Strengthened brand PR and encouraged to apply for membership through expansion of consulting channels besides CHA medical centers
- Sustained price competitiveness by providing effective and reasonable price policies

▶ # of Cord Blood Transplant Operations (Cumulative)

(Unit: # of operations including family cord blood storages and donations)
(based on data disclosed on each company's website)



02

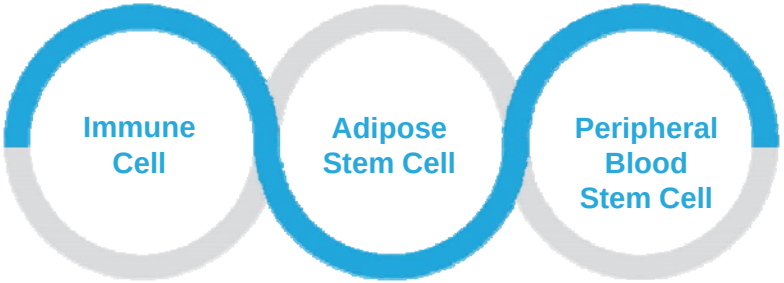
Bio Business

01. Cell Therapeutics Business
02. Cord Blood Business
03. Bio Insurance Business
04. CHAUM Business

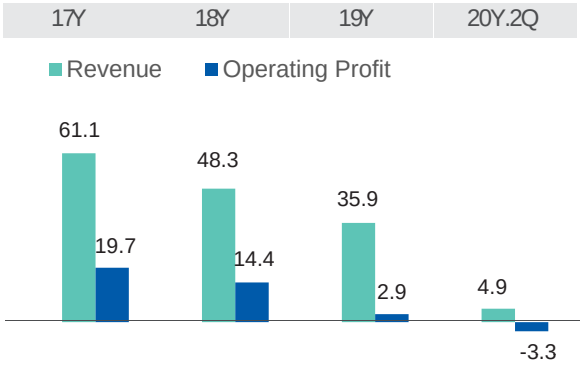
Stem Cell Banking Solution Provider Offering Diverse Stem Cells Lines for Future Medical Use

▶ Bio Insurance Program

- Highly personalized comprehensive stem cell and immune cell banking services to prepare for unexpected disease outbreaks



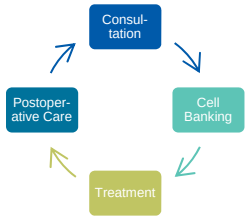
(Unit: KRW 100M)



Immune Cell	Adipose Stem Cell	Peripheral Blood Stem Cell
• Controlling immune system or directly killing viruses • Activated immune cells have ability to find and kill tumor cells	• Can be easily obtained and has no immunological problem • Very ideal to generate large quantities of cells with small number of adipose stem cells	• Hematopoietic stem cells from peripheral blood used for treatment of blood cancer, solid cancer, and autoimmune disease • Can be collected easily with blood donation machine by injection G-CSF to have bone marrow-derived stem cells move to peripheral blood

▶ Features of Bio Insurance

- Implementation of cell-based immune therapies to improve treatment effect
- One stop service from cell banking consultation to post-operative care CHA Medical Group's infrastructures
- Services provided by CHA Medical Center Group and Tokyo Cell Clinic



▶ Necessity of cell banking

- Stem cell and immune cell-based therapeutics expected to be commercialized in short period of time
- Aging linked to cell aging, resulting in decrease in number of cells and cell activity
- Autologous transplantation avoiding any risk of immune rejection
- Lifetime insurance preparing for unpredictable disease risks

▶ Cell Banking Steps:

02

Bio Business

01. Cell Therapeutics Business
02. Cord Blood Business
03. Bio Insurance Business
04. CHAUM Business

Korea's First Premium Innovative Anti-aging Life Center

Delivery of most optimized & cutting-edge personalized healthcare services

▶ Mission & Vision

Establishing new anti-aging management system through provision of stem cell therapies

Virtual hospital seeking to ensure highest quality of healthcare management services

Discovering new medical technologies through ongoing clinical research studies

World class model focusing on total health and personalized preventive medical services

CHA Biotech ㈜차바이오텍

Chaum

"Better Beauty"

"Better Health"

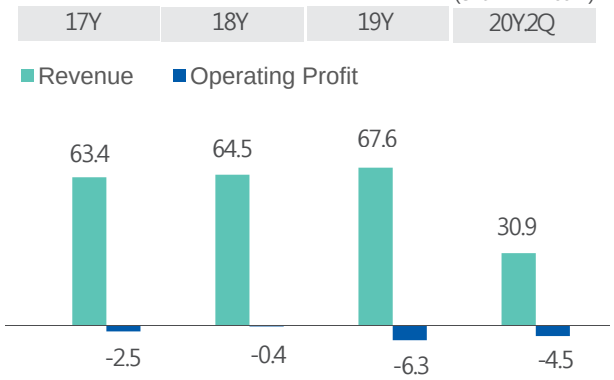
▶ The Power to Age Beautifully CHAUM

- Maintain external growth and quality improvement through providing attractive membership promotion for regular members and family members
- Secure additional revenue sources by continuously expanding inflow of overseas customers
- Revenue diversification and profit-loss structure analysis → Expect to achieve turnaround in 2019




▶ Current Status of CHAUM Business

(Unit : KRW 100 M)



From Pre-care and At-care to Post-care

Future-oriented life center providing highly personalized comprehensive healthcare services

CHAUM's Signature Program	Pre-Care (Preventive Healthcare / Check up)	At-Care (Personal Healthcare)	Post-Care (Regenerative Healthcare)
Personalized Medical Checkup & Anti Aging 1)	V		
• Premium medical examination service where medical staffs and equipment come to patient's private space ('hive cell') • Health concierge service including one-on-one nursing service, record keeping, follow up consultation and etc.	01	• Premium medical check up programs: Premium program, specialized women's health program, cancer-related checkup program, healthcare program, anti-aging program, customized and specialized corporate health program	
Outpatient Care 2)		V	
• Expert consultation from Korea's highly respected doctors • Global network of renowned doctors	02	• General practice: Obstetrics/ gynecology, family medicine, endocrinology, gastroenterology, cardiology, dermatology, urology, neurosurgery, orthopedics, rehabilitation medicine, neuropsychiatry, eastern clinic (8-constitution medicine)	
Life Center Wellness Care 3)	V		V
• New concept of healthcare services combining regenerative clinical care and total relaxation • ACSM and NSCA certified personal trainers and staffs	03	• Specialized care: centers Anti-aging center, metabolic syndrome health center, food therapy center, center for dielectrics, immune enhancement center, nerve and muscle care center, international consultation center, detox sliming center, plastic surgery center, hair spa center, therapeutic spa center, evercell skincare center • CHA IN CHA, Les Trois (anti-aging restaurant), benefit center (fitness, golf clinic, pilates)	
Stem Cell Technology 4)			V
• Bio Insurance providing stem cell and Immune cell banking services for future use	04	• Bio Insurance: Collection → Separation → Examination → Storage • CHA Bio F&C Evercell Bio cosmetics	

Signature Organic Aromatherapy Body

Deeptissue Massage

Lavender Rose Stone Massage

Remedial Massage

Vichy Shower

Watsu

Hammam Bath

Hydro Bath

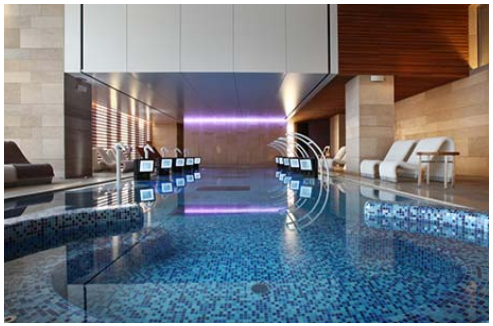
Thermal Capsule

Fitness

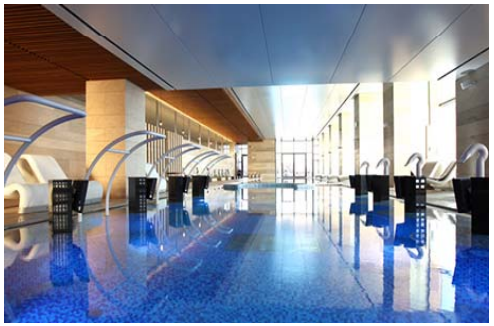
Fitness

Golf Clinic

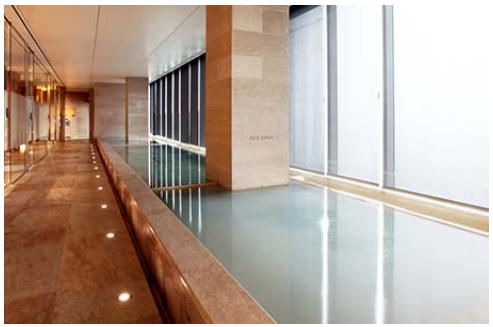
Pilates



Aqua Therapy

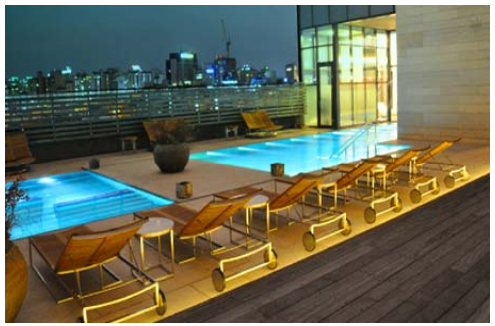


Aqua Therapy



Sauna

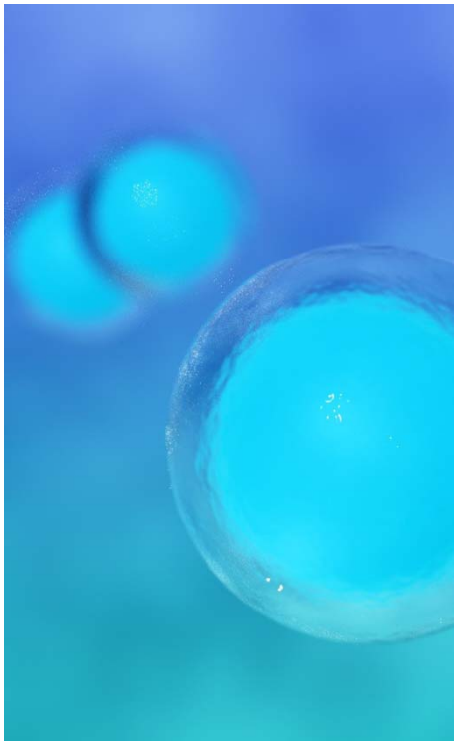
Indoor Exercise Pool



Outdoor Exercise Pool

03

APPENDIX



01: CHAUM Global Stem Cell Clinical Trial Center

World's First and Only Clinical Trial Center Devoted Exclusively to Stem Cell Research

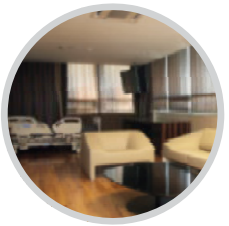
Currently conducting great deal of domestic and foreign clinical trials

International collaboration and partnership in clinical trials

- Cell manufacturing facilities
- GMP facilities
- Stem cell bank

World-Class Global Stem Cell Clinical Trial Center

Building size of 2,652 m2



- Stem cell transplant center
- Exclusive for stem cell transplantation and post-operative care following surgical procedure (100 beds)

Core Competencies

Driving directions to accurate clinical trials

- Clinical researchers and physicians participated from early stage of development

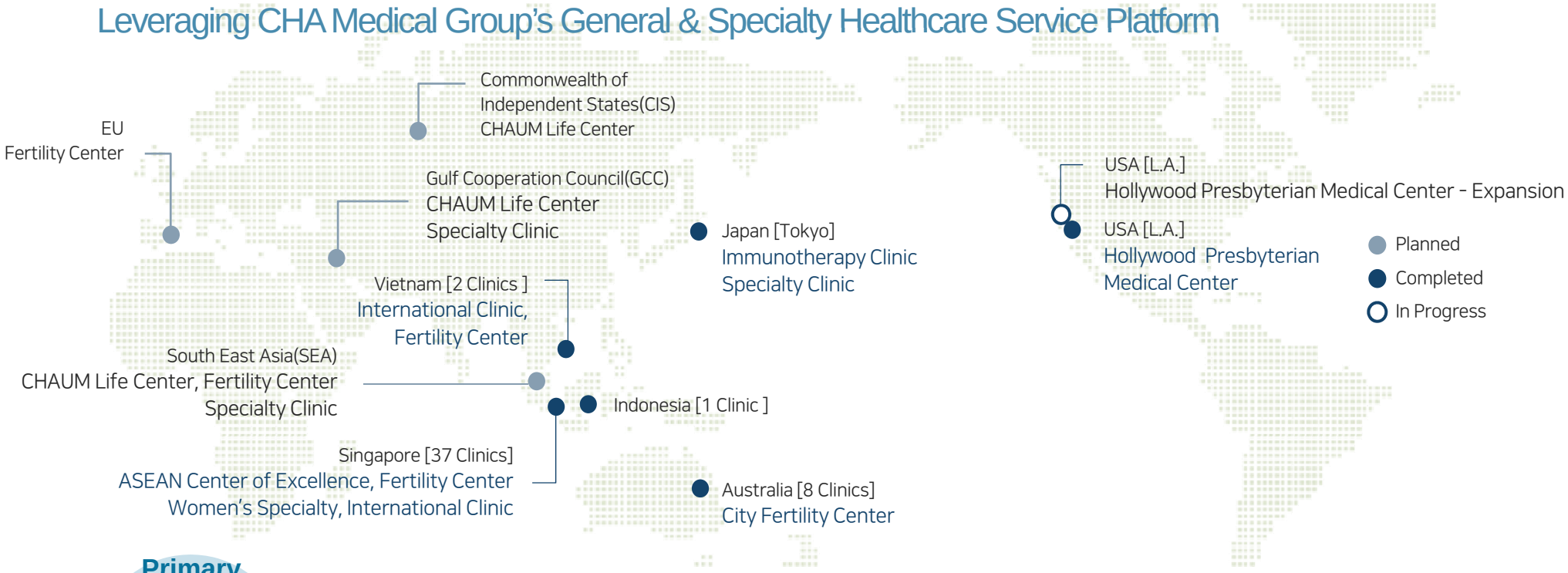
One-stop treatment service

- Equipped with integrated facilities for manufacture, research, hospitalization and treatment
- Protecting stem cells against damage

Shortened development period

- Rapid cell cultivation and proliferation procedures following extraction of cells

Clear Roadmap for Provision of New Undiscovered Medical Technologies Worldwide by Leveraging CHA Medical Group's General & Specialty Healthcare Service Platform



Primary Strategy

Establishing future growth engine

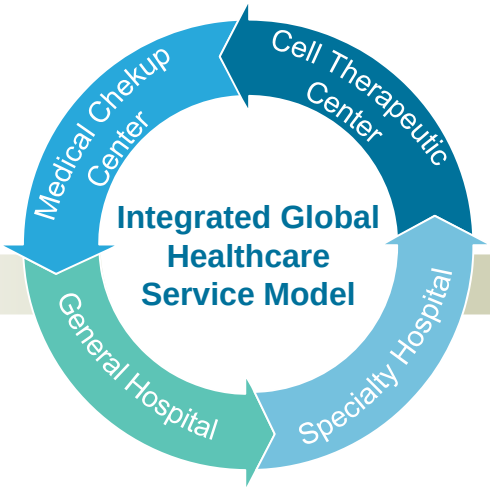
Secondary Strategy

Global network expansion

- Acquisition of general & specialty hospitals
- Expansion of CHAUM model globally

Tertiary Strategy

Securing healthcare service platform across Pan Asia Pacific region (CHA + Stem cell technologies)



CHA HEALTH SYSTEMS

Value creation through realizing network of comprehensive cell therapy technology-based hospitals

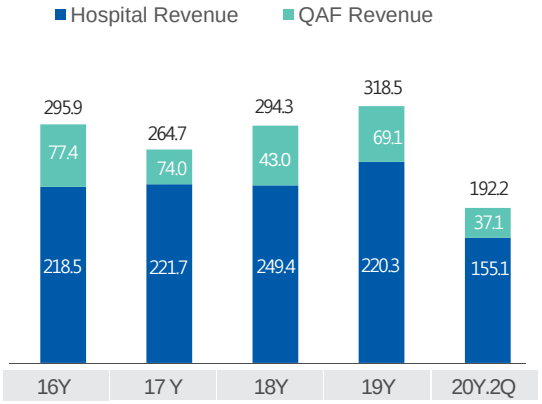
03: General Hospital_L.A

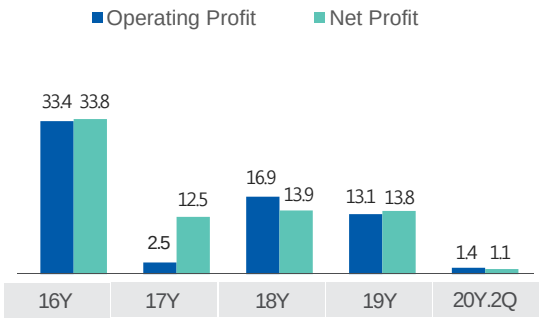
▶ CHA Hollywood Presbyterian Medical Center (L.A)

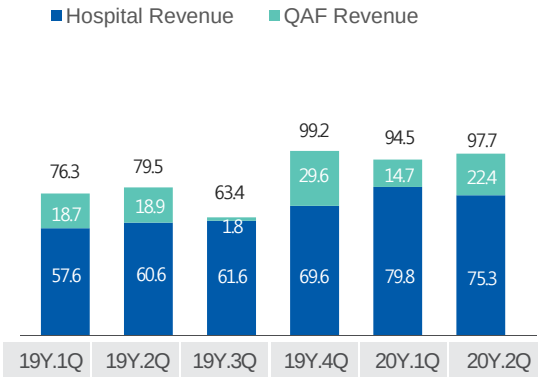
- Established in 1924; Acquired from Tenet Health Systems in 2004
- Largest privately owned for-profit hospital in L.A with 434 licensed beds
- 4th largest maternity service in Southern California
  - Over 5,000 childbirth cases per year
- New patient care tower currently under construction
  - USD 350 million campus upgrade
  - Building will include a medical/surgical patient unit, NICU, clinical lab, morgue and information technology services

▶ Financial Performance of CHA HPMC by year

(Unit : USD million)



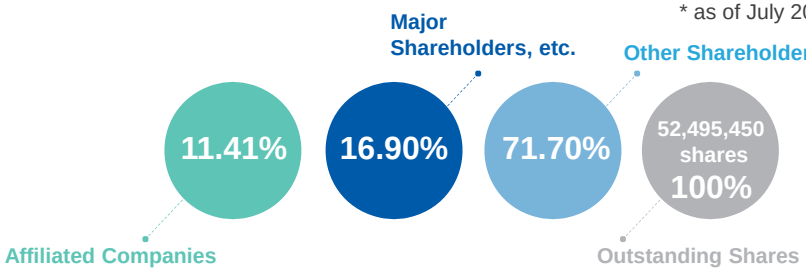




04: Corporate Structure & Percentage Ownership

CHA BIOTECH

* as of July 2020



Subsidiary Companies in US

- 100% **CHA Biotech USA, Inc.** (Holding company in US)
- 100% **Matica Biotechnology, Inc.** (Biotech R&D in US)

Subsidiary Companies in Korea

Main subsidiary companies **as of June 2020

- 59.6% **CHA Healthcare Co., Ltd.** (Global hospital investment & operation in Korea)
  - 100% **CHA Health Systems,** Inc. (Holding company for global hospital operation in US)
    - 100% **CHS Healthcare Manage-ment, LLC. (**Hosp-ital management in US)
    - 100% **CHS Property Management, LLC. (**Real estate management in US)
    - 98% **CHS Property Holdings, L**P. (Real estate holding in US)
    - 98.7% **CHA Hollywood Medical Center, LP. (**General Hospital in US)
    - 95.7% **Archstone Investments, LLC.** (Fund Management in US)
    - 100% **Kula Green, LLC.** (Real estate development company in US)
    - 100% **CHA Captive Insurance, Inc.** (Insurance company in US)
    - 100% **Hollywood Safe Transport, Inc.** (Bio-insurance business in US)
    - 100% **CHA Health Plan, Inc.** (Insurance company in US)
    - 100% **CHA Medical Manage -ment, LLC.** (Medical Admin. Service in US)
  - 90.5% **CHA Reproductive Mana-ging Group, Inc.** (Fertility center management in US)
  - 100% **CHA Medical Service Co., Ltd.** (Manufacturing of immune cells in Japan)
  - 100% **ChaungLa Healthcare Co., Ltd.** (Real Estate & Investment Development)
  - 100% **CHA Healthcare Singa-pore Pte. Ltd.** (Hospital operation in SG.)
    - 80% **CHA SMG Australia Pte. Ltd.** (CHC-SMG Consortium)
      - 100% **CHA SMG Australia Property Pty. Ltd.** (IVF center Investment in AU)
      - 64.5% **CHA SMG Australia Holding Pty. Ltd.** (IVF center Investment in AU)
      - 100% **CHA SMG Australia Corporate Pty. Ltd.** (IVF center Investment in AU)
      - 100% **CFC Global Pty. Ltd.** (IVF center operation in AU.)
    - 100% **CHA IVF Taiwan Pte. Ltd.** (Taiwan IVF center operation in SG.)
    - 37.5% **2014 Solidus** Growth Ladder startup fund
    - 100% **ELBIO, INC.** (Referral-selling reagents for R&D laboratories)
  - 25.8% **CMG Pharmaceutical Co., Ltd.** (Manufacturing & sales of pharmaceuticals)
  - 88.3% **Seoul CRO Co., Ltd.** (Contract research organization)
  - 46.0% **CHA Vaccine Institute Co., Ltd.** (3rd generation vaccine development)
  - 72.6% **CHA Meditech Co., Ltd.** (Medical device develop-ment)
  - 100% **CHA Bio Lab Co., Ltd.** (Contract drug manufactur -ing & basic research)
  - 58.2% **Solidus Investment Co., Ltd.** (Venture capital Investment)
  - 46.5% **CHA Cares Co., Ltd.** (Healthcare service provider)

05: Subsidiary Companies_CMG Pharmaceutical & CHA Meditech

CHA Biotech

CMG Pharmaceutical CO.,LTD.

CMG Pharmaceutical is…

- Acquired by CHA Medical Group in November, 2011 and specialized in the manufacture of pharmaceuticals such as antibiotics, antifungal, antivirus, peptic ulcer drugs, dementia remedies, antihistamines, etc.
- It recently introduced oral thin film (OTF) medications (Tadalafil OTF, Aripiprazole OTF, Enteavir OTF, etc.) by applying its patented technology called StarFilm technology.

Company Name	CMG Pharmaceutical Co., Ltd. (KOSDAQ : 058820)
CEO	Joo Hyung Lee
Date Established	August, 2001
Capital(2019)	KRW 69.5 billion
Revenue(2019)	KRW 58.6 billion
Core Business Lines	Manufacturing of Pharmaceuticals/ OTF Product Development/ Licensing in&out
Offices	(HQ) Seoul, (Factory) Siheung, (Research Institute) Sengnam
Website	www.cmgpharma.co.kr

CHA MEDITECH ㈜차메디텍

CHA Meditech is…

- Founded as CHA Biotech spin-off company in August, 2013. The core business field is the manufacturing and distribution of medical device and biomedical supplies.
- It mainly develops and manufactures medical devices including Hyaluronic acid dermal filler (Hyafilia) and Hyaluronic acid injection (Bellona) for domestic and foreign markets.

Company Name	CHA Meditech Co., Ltd.
CEO	Seok Jin Kim
Date Established	August, 2013
Capital(2019)	KRW 1.5 billion
Revenue(2019)	KRW 13 billion
Core Business Lines	Medical Device Development
Offices	(HQ) Dejeon, (Branch) Seongnam
Website	www.chamt.co.kr

05: Subsidiary Companies_CHA Vaccine Institute & CHA Cares

CHA Vaccine Institute is…

- A vaccine and immunotherapy development company. Its phase I/IIa clinical trial of 3rd generation HBV (Hepatitis B Virus) vaccine for non-responders to conventional vaccines has been completed in 2015.
- The phase I clinical trial of therapeutic HBV vaccine using its proprietary adjuvant immunotherapy for carrier of the virus is ongoing and it also develops recombinant protein drugs.

Company Name	CHA Vaccine Institute Co., Ltd.
CEO	Jung Sun Yeom
Date Established	June, 2000
Capital(2019)	KRW 8.8 billion
Revenue(2019)	KRW 0.1 billion
Core Business Lines	Preventive and Therapeutic Vaccines Development for Infectious Disease
Office	(HQ) Seongnam
Website	www.chavaccine.com

CHA Cares is…

- A facility management service development company. It provides call center service, security service, technical building maintenance and cleaning service for the hospitals, corporations, university of CHA Medical Group.
- It also runs healthcare business such as elderly care(silver care), maternity care(Mom's care) and funeral service.

Company Name	CHA Cares Co., Ltd.
CEO	Jong Kook Song
Date Established	Sept., 2000
Capital(2019)	KRW 2.9 billion
Revenue(2019)	KRW 36.8 billion
Core Business Lines	Facility Management/Healthcare Services
Office	(HQ) Seongnam
Website	www.chacarescorp.com

05: Subsidiary Companies_Seoul CRO & CHA Healthcare

Seoul CRO is…

- A clinical research organization company specializing in pharmaceuticals and medical devices. Seoul CRO has extensive experiences conducting stem cell studies of CHA Medical Group.
- It offers a full range of clinical, consulting and commercial services that range from trial design to full execution, post-market commercialization and overseas expansion.

Company Name	Seoul CRO Co., Ltd.
CEO	Jung Hoon Kim
Date Established	April, 2009
Capital(2019)	KRW 1 billion
Revenue(2019)	KRW 6 billion
Core Business Lines	Clinical Trial Services, Pharmaceutical Consulting, etc.
Office	(HQ) Seoul
Website	www.seoulcro.co.kr

CHA Healthcare is…

- A Korea's only Management Service Organization company established in August, 2013 and currently operating a general acute care hospital (HPMC) and a fertility center (CFC) in LA, US and cell clinic (TCC) in Tokyo, Japan.
- With CHA Medical Group's management know-how and brand value, it is pushing ahead with development in advanced healthcare across the world.

Company Name	CHA Healthcare Co., Ltd.
CEO	Kyeong Wook Yoon
Date Established	August, 2013
Capital(2019)	KRW 69.3 billion
Revenue(2019)	KRW 384.9 billion
Core Business Lines	Global Hospital Investment and Operation
Offices	(HQ) Seoul (Overseas) LA, US and Tokyo, Japan
Website	www.chahealthcare.com

05: Subsidiary Companies_Solidus Investment, CHA Biolab

SOLIDUS INVESTMENT
(주)솔리더스인베스트먼트

Solidus Investment is…

- A venture capital firm founded by CHA Medical Group in June, 2011 and specialized in companies operating in biotechnology, agricultural, marine product, green energy and information technology sectors.
- In 2016, Solidus and KB Investment were selected as the managing firms of the KRW 150 billion healthcare fund (Korea Venture Fund).

Company Name	Solidus Investment Co., Ltd.
CEO	Jung Hyun Kim
Date Established	June, 2011
Capital(2019)	KRW 8 billion
Revenue(2019)	KRW 10 billion
Core Business Lines	Bio/Agricultural and Marine Products/ Green Energy/ IT Technology, etc.
Offices	(HQ) Seoul
Website	www.solidusvc.com

CHA Biolab
㈜차바이오랩

CHA Biolab is…

- A CMO(Contract Manufacturing Organization) and NK Cell therapeutics development company founded in June 2018 and is a wholly-owned subsidiary of CHA Biotech.
- It was established through the physical division of CHA Biotech's CMO business and basic research business.

Company Name	CHA Biolab
CEO	Dong Joon Lee
Date Established	June, 2018
Capital(2019)	KRW 4.5 billion
Revenue(2019)	KRW 0.4 billion
Core Business Lines	NK Cell therapeutics, CDMO
Offices	(HQ) Seongnam
Website	www.chabiolab.com

06: Financial Statement

▶ Statement of Financial Position (K-IFRS)

(unit: KRW 100 M)

	2020.1H	FY19	FY18
Current Assets	613,082	509,150	463,558
Other Assets	710,245	653,773	483,974
Total Assets	1,323,327	1,162,923	947,532
Current Liabilities	295,349	215,908	227,938
Other Liabilities	357,490	280,717	169,347
Total Liabilities	652,839	496,625	397,285
Capital	26,248	26,240	26,239
Capital Surplus	273,303	272,687	272,442
Capital Adjustments	-24,306	-22,952	-22,749
Other Cumulative Comprehensive Income	-7,086	-14,451	-19,526
Earned Surplus	109,385	115,659	70,585
Non-controlling Interest	292,944	289,115	223,256
Total Nest Assets	670,488	666,298	550,247
Total Liabilities and Net Assets	1,323,327	1,162,923	947,532

▶ Income Statement (K-IFRS)

(unit: KRW 100 M)

	2020.1H	FY19	FY18
Revenue	317,715	534,612	488,600
COGS	227,568	354,494	320,879
Sales Profit	90,147	180,118	167,721
SG&A Expense	96,141	174,280	148,706
Operating Profit	-5,993	5,837	19,015
Finance Income	12,948	23,473	33,408
Finance Costs	16,338	14,285	17,061
Other Operating Income	1,971	56,241	4,603
Other Operating Expense	1,166	7,035	3,664
Increase in equity in profit or loss of related companies	216	3,079	289
Net profit before deduction of corporate tax expense	-8,362	67,310	36,590
Corporate Tax Expense	945	14,942	185
Net Profit from Continued Operation	-9,307	52,368	36,405
Net Profit from Discontinued Operation	0	0	-308
Net Profit	-9,307	52,368	36,097

CHA BIOTECH

Investor Relations 2019

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