Gamida Cell
Cell Therapy Products

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Company Profile

- Gamida Cell was established in 1998
- Developing biotechnology products based on stem cells from umbilical cord blood
- Proprietary technologies to expand populations of stem cells
- StemEx® in phase III clinical trial. NiCord to start clinical study in 2010
- Broad patent portfolio
- Strategic partnerships with Teva Pharmaceuticals and Amgen
- Strong management, team of 36 people
- $42 million raised in equity

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Target Market in Hematological Malignancies

- Bone Marrow Transplantation is a potentially life saving treatment for patients with leukemia or lymphoma. In clinical practice for >40 years
- 600,000 patients with leukemia or lymphoma in the developed world
- 160,000 new patients each year
- 50,000 patients each year are indicated for bone marrow transplantation
- Only 20,000 patients each year are getting a transplant
- Annual growth rate in the number of transplantations is 3%

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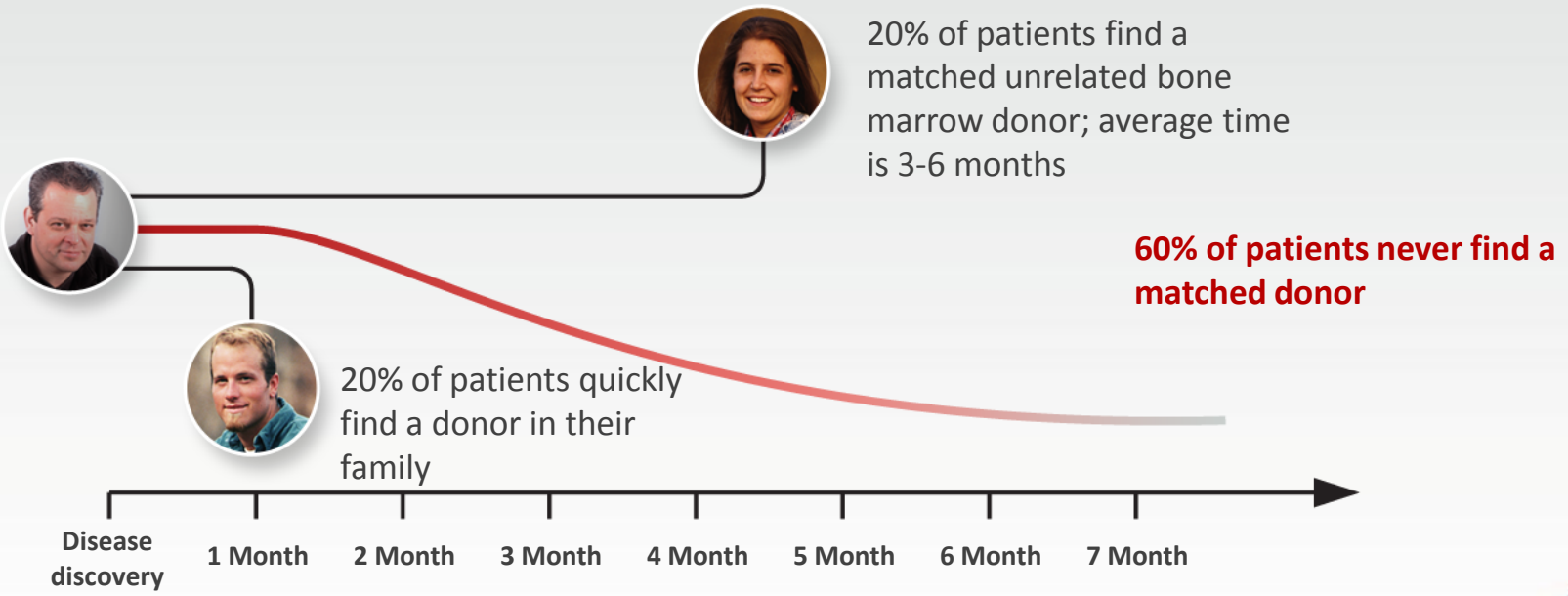
Finding a Bone Marrow Donor

- Following diagnosis, time to bone marrow transplantation is critical
- Only 20% of patients have a bone marrow donor in their family
- Additional 20% of patients find an unrelated bone marrow donor
- More than half the patients never find a fully matched bone marrow donor; their disease will progress



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Umbilical Cord Blood: Alternative Transplant

>400,000 cord blood units are cryo-preserved in public cord blood banks

Advantages of Cord Blood Transplantation:

- No need for full tissue matching
- Rapid identification of a cord blood unit for the patient

Limitation of Umbilical Cord Blood:

- Small number of stem cells

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Innovative Technology to Expand Populations of Stem Cells

Cord Blood Unit

GMP facility
US, Belgium, Israel

Expansion Cultures

StemEx® for Infusion

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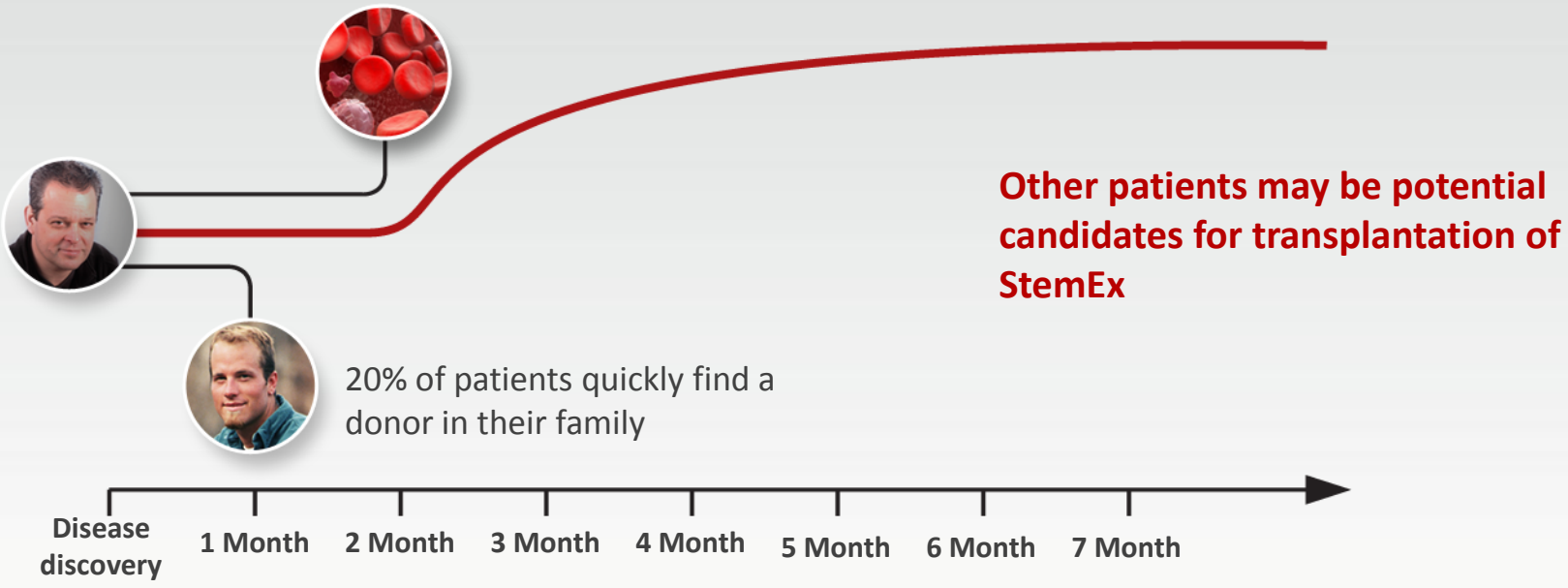
Transplanting StemEx®

- StemEx can be rapidly available for transplantation
- 3 week manufacturing process; During this time the patient is treated with high dose chemotherapy and radiation, preparing him for the transplantation



Other patients may be potential candidates for transplantation of StemEx

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StemExR® Phase I/II Clinical Trial

- StemEx is a single unit of umbilical cord blood, enriched with stem cells
- A phase I/II clinical trial was completed in 2005 at M. D. Anderson Cancer Center, Texas, US
- 10 patients with leukemia or lymphoma were transplanted with StemEx; Follow-up of 180 days
- StemEx demonstrated a good safety profile

Clinical Endpoint	Historical Control Group*	StemEx® Phase I/II
100 day survival (% patients)	56	90
Engraftment (% patients)	83	90
Graft vs Host Disease grade III/IV (% patients)	21	0
180 day survival (% patients)	45	60

(*)Phase I/II had no control group. This is the historical control cohort for current phase III study, composed of 514 patients transplanted with single un-manipulated unit of cord blood

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StemEx® Phase III Clinical Trial

- Global pivotal registration phase III study, approved by the FDA under SPA
- Multi-national study to evaluate the safety and efficacy of StemEx
- 100 patients with leukemia or lymphoma will be transplanted with StemEx
- The control group is comprised of 514 similar patients who were transplanted with an un-manipulated unit of cord blood, during the years 1995-2005
- Primary endpoint: 100 days survival (% patients)

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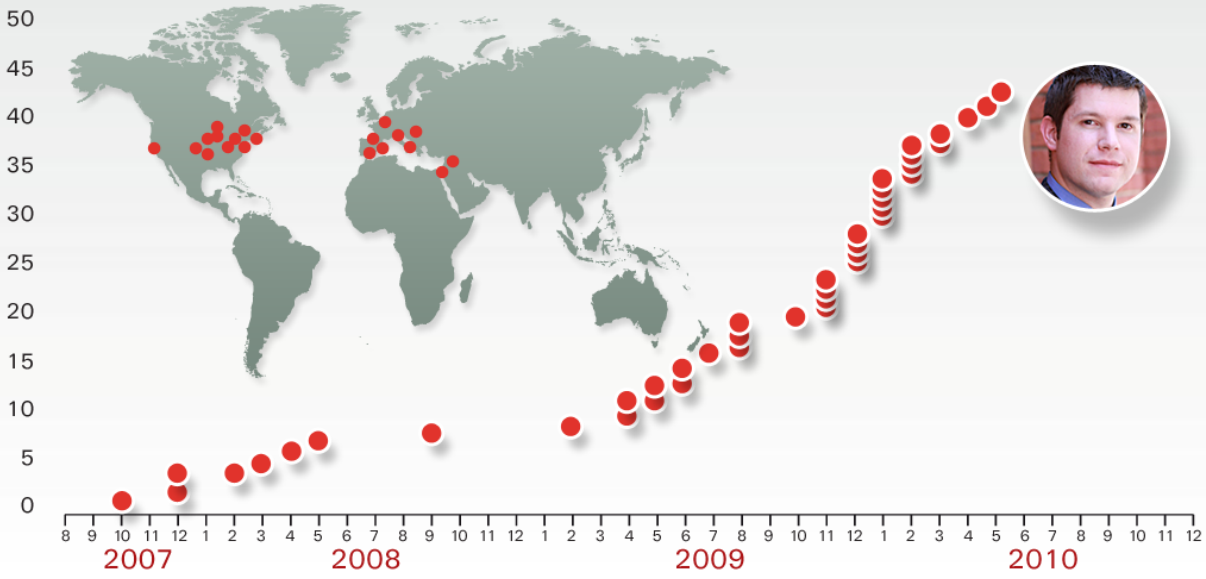
StemEx® - Status of Phase III Clinical Study

- >40 patients already transplanted in 26 clinical sites, in the US, Europe and Israel
- Patients in phase III study were transplanted with, on average, 15 times larger number of stem cells, as compared to the original cord blood unit
- No unusual adverse events reported so far
- DMC (Data Monitoring Committee) recommended the continuation of the recruitment of patients
- Clinical study planned to complete in 2011



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Joint Venture with Teva Pharmaceuticals

- Gamida Cell granted the JV an exclusive license for StemEx® in hematological diseases
- JV is equally owned (50/50) by Gamida Cell and Teva
- Commercialization rights retained by the JV
- Revenues will be split 50:50 between Gamida Cell and Teva
- Neither the JV nor Teva have rights to other products developed by Gamida Cell

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StemEx® Business Model

- Significant unmet clinical need for patients indicated for bone marrow transplantation without a bone marrow donor in their family
- Umbilical cord blood is a readily available and safe source for cells
- StemEx may be a solution for patients without a matched donor in their family
- Orphan Drug status in the US and Europe.
- Reimbursement for cord blood transplantation in the US is, on average, $200,000 (*)
- Niche product: only 200 transplantation centers in the US. Marketing expenses are expected to be lower

(*) Boston Healthcare Associates Inc., research performed for the JV in 2009

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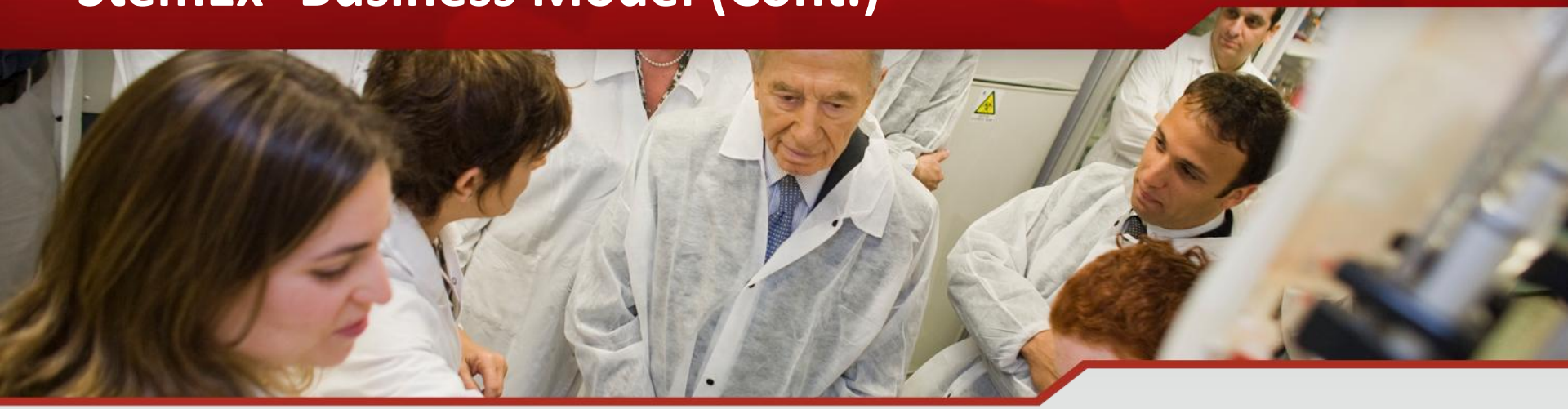
StemEx® Business Model (Cont.)



- JV is working to reduce StemEx manufacturing and shipping costs by developing a frozen product that can be manufactured by central manufacturing site(s).
- Expected pricing for StemEx: 20 – 50 thousand dollars (*)

(*) Boston Healthcare Associates Inc., research performed for the JV in 2009

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StemEx® Economics

Cost of cord blood transplantation is primarily affected by the following parameters (*):

- Length of hospitalization
- Time to neutrophil engraftment
- Time to platelet engraftment
- Development of Graft-vs-Host disease

The JV is hoping to show improvement in all the above parameters, to justify a higher price for StemEx

(*) Majhail, N. S., C. G. Brunstein, et al. (2009). "Double umbilical cord blood transplantation." *Curr Opin Immunol* ***18****(5): 571-575*

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Competition

- Several companies and research groups are developing technologies and products to improve the clinical outcome of cord blood transplantation: Hutchinson, Mesoblast, Novartis, Cellerant, Fate
- StemEx® is in the most advanced stage of development and expected to reach the market first
- Double cord blood transplantation is being tested in the US in a large clinical trial by the NCI. Study planned to complete in few years, outcome not yet available. Small studies with double cord transplantation demonstrate no shortening in time to engraftment

Indirect Competition

- Drugs to treat various types of leukemia and lymphoma:
  Vidaza, Revlimid, Thalidomid, Gleevec, Rituxan

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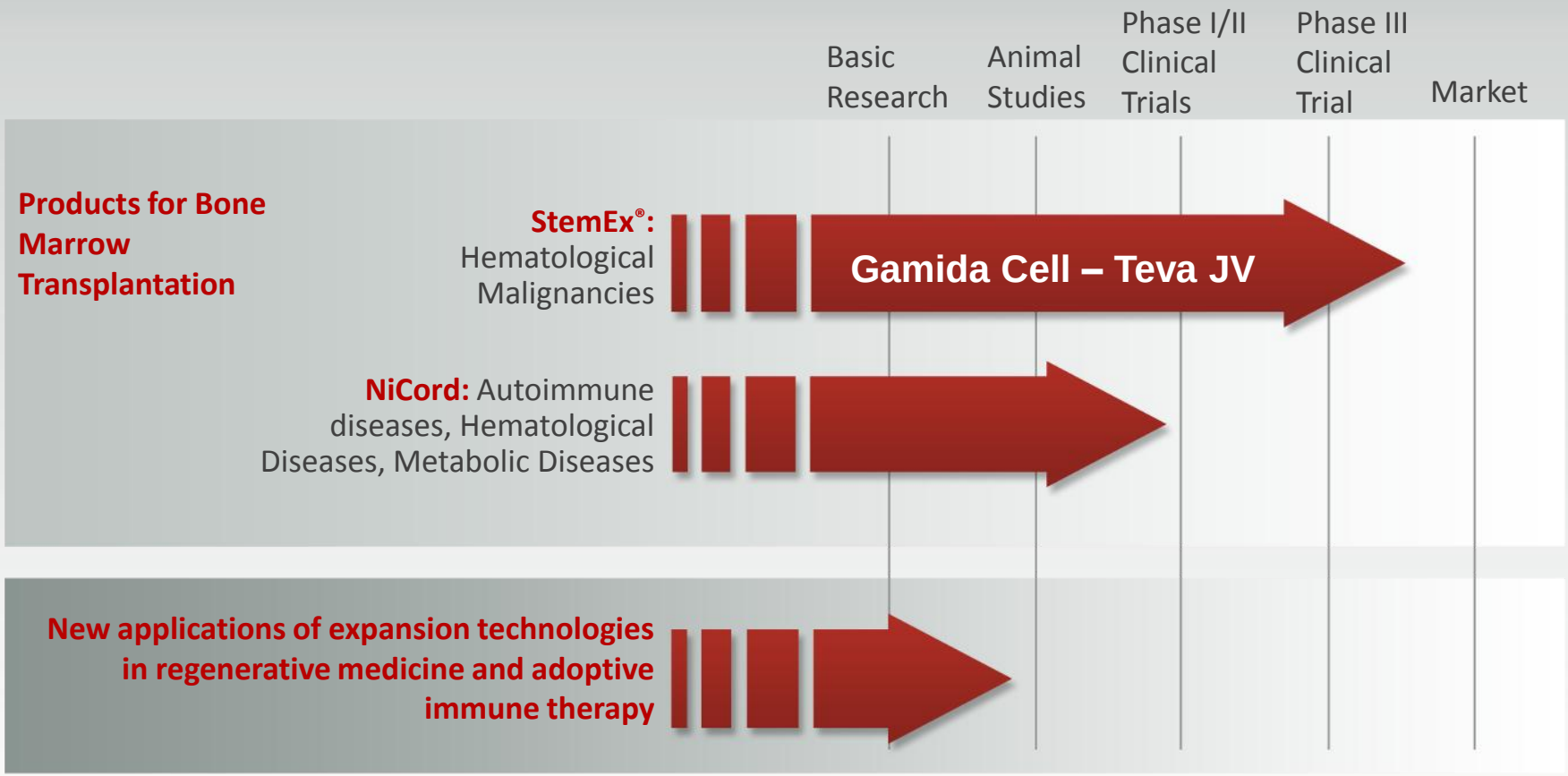
Gamida Cell Pipeline of Products



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NiCord™ Treatment for Severe Autoimmune Diseases

- Autoimmune diseases develop when the patient's immune system attacks his own tissues
- Prevalence: >5% of population
- Main cause for morbidity and mortality in young women
- Autoimmune diseases include: Multiple Sclerosis, Lupus, Rheumatoid Arthritis, Juvenile Diabetes, Crohns' Disease
- Available treatments are symptomatic and include combinations of anti-inflammatory drugs, steroids and suppression of the immune system. In many patients the disease can become resistant to drug treatment, leading to high morbidity and sometimes death
- Preliminary observations demonstrate improvement in the condition of 75% of autoimmune disease patients, following bone marrow transplantation from a donor (*)

(*) Allogeneic hematopoietic SCT for patients with autoimmune diseases. *Bone Marrow Transplantation* 44, 27-33 (July (1) 2009)

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NiCord™ Treatment for Severe Autoimmune Diseases

- NiCord is based on a unit of umbilical cord blood enriched with stem cells using innovative NAM technology
- Promising animal data
- A pilot clinical trial is planned to begin in the US under IND in 2010
- A phase I/II clinical trial in patients with severe autoimmune diseases is planned to start in 2011
- Gamida Cell owns all rights for NiCord

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Clinical and Scientific Advisory Committee

- Prof. Patrick Stiff, Loyola University, United States
- Prof. Guillermo Sanz, Valencia, Spain
- Prof. Joanne Kurtzberg, Duke University, United States
- Prof. Pablo Rubinstein, NY Blood Center, United States
- Prof. Elizabeth Shpall, M. D. Anderson, United States
- Prof. Mary Laughlin, Case Western University, United States
- Prof. Arnon Nagler, Sheba Medical Center, Israel

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Thank you for your attention

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