BEFORE THE
APPLICATION REVIEW SUBCOMMITTEE OF THE
INDEPENDENT CITIZENS' OVERSIGHT COMMITTEE
TO THE
CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE
ORGANIZED PURSUANT TO THE
CALIFORNIA STEM CELL RESEARCH AND CURES ACT

REGULAR MEETING

LOCATION: VIA ZOOM

DATE: MAY 30. 2024
9 A.M.

REPORTER: BETH C. DRAIN, CA CSR
CSR. NO. 7152

FILE NO.: 2024-25

I N D E X

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MAY 30, 2024; 9 A.M.

CHAIRMAN IMBASCIANI: THANK YOU VERY MUCH. GOOD MORNING TO ALL MEMBERS OF THE BOARD. THIS IS THE MAY 30 MEETING OF THE APPLICATION REVIEW SUBCOMMITTEE OF THE BOARD, OF THE CIRM GOVERNING BOARD. I WANT TO WELCOME ALL THE BOARD MEMBERS TO THIS MEETING AND TO ALL THE MEMBERS OF THE PUBLIC WHO ARE EITHER LISTENING IN OR WHO HAVE GRACED US WITH THEIR PRESENCE HERE TODAY IN THE BOARDROOM. GOOD MORNING.

SO WE'RE GOING TO START THE MEETING WITH A CALL TO ORDER AND THE ROLL CALL.

MR. HUANG: DAN BERNAL. MARIA BONNEVILLE.

VICE CHAIR BONNEVILLE: PRESENT.

MR. HUANG: JUDY CHOU.

DR. CHOU: PRESENT.

MR. HUANG: LEONDRA CLARK-HARVEY. ANNE-MARIE DULIEGE. YSABEL DURON.

MS. DURON: HERE.

MR. HUANG: MARK FISCHER-COLBRIE.

DR. FISCHER-COLBRIE: HERE.

MR. HUANG: FRED FISHER.

DR. FISHER: HERE.

MR. HUANG: ELENA FLOWERS.

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DR. FLOWERS: PRESENT.
MR. HUANG: DAVID HIGGINS.
DR. HIGGINS: PRESENT.
MR. HUANG: VITO IMBASCIANI.
CHAIRMAN IMBASCIANI: HERE.
MR. HUANG: STEVE JUELSGAARD.
MR. JUELSGAARD: PRESENT.
MR. HUANG: RICH LAJARA.
MR. LAJARA: HERE.
MR. HUANG: LAUREN MILLER-ROGEN. ADRIANA PADILLA.
DR. PADILLA: HERE.
MR. HUANG: JOE PANETTA.
MR. PANETTA: HERE.
MR. HUANG: MARVIN SOUTHARD.
DR. SOUTHARD: HERE.
MR. HUANG: KAROL WATSON. KEVIN XU.
DR. XU: HERE.
MR. HUANG: WE HAVE QUORUM.
CHAIRMAN IMBASCIANI: WE HAVE A QUORUM. GREAT. THANK YOU.
WE CAN START WHAT'S GOING TO BE A FULL -- WE'RE GOING TO USE ALL THE TIME ALLOTTED TO US TODAY. THERE ARE MANY MEMBERS OF THE PUBLIC WHO HAVE STATED THEIR DESIRE TO SPEAK. I'M PROBABLY

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GOING TO HAVE TO ASK THEM TO LIMIT THEMSELVES TO TWO MINUTES BECAUSE WE ABSOLUTELY HAVE TO COMPLETE OUR AGENDA BY THE TIME THIS MEETING IS SCHEDULED TO END AT 11 O'CLOCK THIS MORNING.

WE HAVE TWO SETS OF APPLICATIONS, CLINICAL AND TRANSLATIONAL, AND WE'RE GOING TO START THE NEXT ORDER OF BUSINESS AS CONSIDERATION OF THOSE APPLICATIONS THAT HAVE BEEN SUBMITTED IN RESPONSE TO THE CLINICAL TRIAL STAGE PROJECTS PROGRAM ANNOUNCEMENT. THESE ARE CLIN 1 OR CLIN 2 IN THE PARLANCE OF CIRM. FOR THIS I'M GOING TO CEDE THE MICROPHONE TO HAYLEY LAM -- WHERE ARE YOU, HAYLEY? -- TO MAKE THE PRESENTATION. THANK YOU. GOOD MORNING.

DR. LAM: GOOD MORNING. THANK YOU, VITO. ALL RIGHT. CAN EVERYONE SEE THAT?

CHAIRMAN IMBASCIANI: YES.

DR. LAM: THANK YOU. ALL RIGHT. SO I'LL TAKE YOU THROUGH THE CLINICAL APPLICATIONS UP FOR DISCUSSION TODAY.

AS ALWAYS, WE BEGIN WITH OUR MISSION,

ACCELERATING WORLD-CLASS SCIENCE TO DELIVER TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENTS IN AN EQUITABLE MANNER TO A DIVERSE CALIFORNIA AND WORLD.

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THE CURRENT STATE OF THE CLINICAL BUDGET IS AS FOLLOWS: JUST UNDER 200 MILLION HAS BEEN ALLOCATED BY THIS GROUP. WE HAVE 12 MILLION IN AWARDS THAT'S UP FOR DISCUSSION TODAY, AND THAT GIVES A REMAINDER OF ABOUT 40 MILLION ON THE FISCAL YEAR.

THE SCIENTIFIC SCORING SYSTEM FOR THE CLINICAL PROGRAM SHOULD BE FAMILIAR TO EVERYONE HERE. IT'S SCORES OF 1, 2, AND 3. A 1 IS A RECOMMENDATION FOR FUNDING. A 2 OR 3 IS A DO NOT RECOMMEND AT THIS TIME, A 2 ALLOWS THE APPLICANT TO RETURN FOR A RESUBMISSION WITHIN THE NEXT SIX MONTHS. A SCORE OF 3 IS A DO NOT RECOMMEND AND THE SAME PROJECT CANNOT BE RESUBMITTED FOR AT LEAST SIX MONTHS. AND ALL THE APPLICATIONS ARE SCORED BY THE SCIENTIFIC MEMBERS OF THE PANEL WITH NO CONFLICT.

AND THEY WILL BE SCORING OR THEY HAVE SCORED, RATHER, ACROSS THESE FIVE SCIENTIFIC REVIEW CRITERIA. FIRST ONE BEING DOES THE PROJECT HOLD THE NECESSARY SIGNIFICANCE AND POTENTIAL FOR IMPACT? TWO, IS THE RATIONALE SOUND? THREE, IS THE PROJECT WELL PLANNED AND DESIGNED? FOUR, IS THE PROJECT FEASIBLE? AND FIVE, DOES THE PROJECT UPHOLD THE PRINCIPLES OF DIVERSITY, EQUITY, AND INCLUSION?

THERE IS ALSO FOR THE CLINICAL PROGRAM A

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SEPARATE DIVERSITY, EQUITY, AND INCLUSION SCORING. AND THESE ARE SCORED BY ALL GRANTS WORKING GROUP BOARD MEMBERS WITH NO CONFLICT. AND THE SCALE IS DIFFERENT HERE. IT'S A ZERO TO TEN WITH A TEN BEING THE BEST RESPONSE. AND THEY'RE SCORED ACCORDING TO THE RUBRIC HERE WHICH IS LINKED ON OUR WEBSITE.

AND JUST TO SUMMARIZE, THE COMPOSITION AND ROLES OF THE FOLKS WHO EVALUATE THESE CLINICAL APPLICATION ARE AS FOLLOWS. WE HAVE UP TO 15 SCIENTIFIC GRANTS WORKING GROUP MEMBERS WHO PROVIDE THE SCIENTIFIC SCORE ON ALL APPLICATIONS. WE HAVE OUR GRANTS WORKING GROUP BOARD MEMBERS. THESE ARE THE PATIENT ADVOCATES AND NURSES THAT PROVIDE A DEI SCORE ON ALL APPLICATIONS AND PROVIDE A SUGGESTED SCIENTIFIC SCORE. AND WE HAVE AD HOC SPECIALISTS THAT COME IN TO PROVIDE SCIENTIFIC EVALUATION ACROSS AREAS OF EXPERTISE THAT ARE NEEDED FOR SPECIFIC APPLICATIONS.

WITH THAT, I'LL TRANSITION TO THE APPLICATIONS UNDER CONSIDERATION TODAY. JUST A NOTE, THAT THE FOLLOWING APPLICATION, CLIN1-14770, HAS THREE MEMBERS OF THE BOARD WITH CONFLICTS OF INTEREST AS FOLLOWS: MARIA BONNEVILLE, YSABEL DURON, AND STEVE JUELSGAARD.

SO CLIN1-14770, THE TITLE OF THIS

APPLICATION IS "AUTOLOGOUS GENE CORRECTED SINUS BASAL CELLS TO TREAT SERIOUS CYSTIC FIBROSIS SINUS DISEASE." THE THERAPY ITSELF IS GENE-CORRECTED BASAL STEM CELLS FROM PATIENTS WITH CYSTIC FIBROSIS. AND THE INDICATION IS CHRONIC SINUSITIS IN CYSTIC FIBROSIS. AND THE GOAL OF THIS PROJECT IS AN IND FILING. THE FUNDS REQUESTED ARE JUST EXACTLY AT 6 MILLION WITH NO CO-FUNDING WHICH NONE IS REQUIRED. AND AN ADDITIONAL NOTE THAT WE'VE ADDED FOR THESE CLINICAL AWARDS AT THE PRIOR ARS, THIS IS A CALIFORNIA ORGANIZATION THAT HAS APPLIED.

A BIT OF BACKGROUND ON THIS APPLICATION. SO CYSTIC FIBROSIS IS A GENETIC DISEASE AND CAN CAUSE LUNG DAMAGE, CHRONIC INFECTIONS, AND ULTIMATELY CAN LEAD TO LUNG FAILURE IN ADDITION TO OTHER COMPLICATIONS. THERE ARE SOME DRUGS THAT CAN PROVIDE BENEFIT, BUT THEY DON'T WORK FOR ALL PATIENTS. AND MANY OF THE NONRESPONDERS ARE ETHNIC MINORITIES.

SO THE PROPOSED THERAPY, HOW COULD IT IMPROVE THINGS? SO THE TREATMENT COULD PROVIDE STABLE RESTORATION OF THE CYSTIC FIBROSIS GENE IN THE AIRWAY, AND THIS COULD POTENTIALLY IMPROVE THE QUALITY OF LIFE FOR PEOPLE WITH CYSTIC FIBROSIS. AND HOW IT'S RELEVANT TO CIRM, THIS THERAPY ITSELF

IS COMPOSED OF AUTOLOGOUS GENE-CORRECTED STEM CELLS.

CIRM PORTFOLIO PROJECTS, SO CIRM DOES NOT CURRENTLY HAVE ANY ACTIVE TRANSLATIONAL OR CLINICAL AWARDS ADDRESSING CYSTIC FIBROSIS.

FUNDING TO THE APPLICANT TEAM. SO THE APPLICANT TEAM HAS RECEIVED SEVERAL CIRM AWARDS PRIOR. IT HAS RECEIVED ONE DISCOVERY STAGE AWARD THAT IS DIRECTLY RELATED TO THE CURRENT APPLICATION UNDER CONSIDERATION. AND THEY ALSO HAVE TWO ACTIVE CLINICAL TRIAL AWARDS AND AN ACTIVE ALPHA STEM CELL CLINIC AWARD.

SO WITH THAT, TO SUMMARIZE, THE GRANTS WORKING GROUP HAS RECOMMENDED THIS APPLICATION UNANIMOUSLY FOR FUNDING WITH A SCIENTIFIC SCORE OF 1. AND THE BOARD MEMBERS HAVE GIVEN THIS APPLICATION A DEI SCORE OF 9. AND THE CIRM TEAM CONCURS WITH THE GWG RECOMMENDATION TO FUND THIS APPLICATION FOR THE TOTAL AMOUNT OF 6 MILLION.

ALL RIGHT. BACK TO YOU, VITO.

CHAIRMAN IMBASCIANI: THANKS, HAYLEY. WE WERE ON MUTE. THANKS FOR THE PRESENTATION AND FOR THE REVIEW OF THIS APPLICATION.

I WOULD NEED A MOTION FROM A BOARD MEMBER FOR DISCUSSION ON THIS.

DR. SOUTHARD: MARV SOUTHARD MOVES

DISCUSSION.

CHAIRMAN IMBASCIANI: THANK YOU, MARV.

DR. CLARK-HARVEY: LEONDRA CLARK-HARVEY, SECOND.

CHAIRMAN IMBASCIANI: MARV, THAT'S A MOTION TO APPROVE IT FOR FUNDING, CORRECT?

DR. SOUTHARD: CORRECT.

CHAIRMAN IMBASCIANI: OKAY. COMMENTS FROM BOARD MEMBERS ON THIS APPLICATION PLEASE.

MS. MORALEZ: THERE'S NO HANDS RAISED.

CHAIRMAN IMBASCIANI: NO HANDS ARE RAISED. OKAY. GREAT. THANK YOU. ARE THERE ANY MEMBERS OF THE PUBLIC WHO WANT TO COMMENT ON THIS APPLICATION?

MS. MORALEZ: THERE ARE NO HANDS RAISED.

CHAIRMAN IMBASCIANI: OKAY. THEN I THINK WE'RE FREE TO PROCEED TO THE ROLL CALL VOTE. THANK YOU.

MR. HUANG: DAN BERNAL.

MR. BERNAL: AYE.

MR. HUANG: JUDY CHOU.

DR. CHOU: AYE.

MR. HUANG: LEONDRA CLARK-HARVEY.

DR. CLARK-HARVEY: AYE.

MR. HUANG: ANNE-MARIE DULIEGE. MARK FISCHER-COLBRIE.

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MR. FISCHER-COLBRIE: YES.
MR. HUANG: FRED FISHER.
DR. FISHER: YES.
MR. HUANG: ELENA FLOWERS.
DR. FLOWERS: YES.
MR. HUANG: DAVID HIGGINS.
DR. HIGGINS: YES.
MR. HUANG: VITO IMBASCIANI.
CHAIRMAN IMBASCIANI: YES.
MR. HUANG: RICH LAJARA.
MR. LAJARA: YES.
MR. HUANG: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MR. HUANG: ADRIANA PADILLA.
DR. PADILLA: YES.
MR. HUANG: JOE PANETTA.
MR. PANETTA: YES.
MR. HUANG: MARVIN SOUTHARD.
DR. SOUTHARD: YES.
MR. HUANG: KAROL WATSON. KEVIN XU.
DR. XU: YES.
MR. HUANG: THE MOTION PASSES.
CHAIRMAN IMBASCIANI: THANK YOU, BEN.
HAYLEY, I'LL CEDE BACK TO YOU FOR PRESENTATION OF THE NEXT APPLICATION.

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DR. LAM: SURE. THANK YOU. SO THE NEXT APPLICATION HAS A CONFLICT WITH KAROL WATSON FOR CLIN1-15399. SO THE TITLE OF THIS APPLICATION IS "DEVELOPMENT OF A THERAPEUTIC MONOCLONAL ANTIBODY FOR THE TREATMENT OF MYOCARDIAL INFARCTION IN HEART FAILURE."

SO THE THERAPY IS A MONOCLONAL ANTIBODY FOR HEART DISEASE. AND THE GOAL OF THIS PROJECT IS AN IND FILING. THE FUNDS REQUESTED ARE JUST UNDER 6 MILLION WITH NO CO-FUNDING, AND NONE IS REQUIRED FOR THIS APPLICATION. AND, AGAIN, THIS IS ALSO A CALIFORNIA ORGANIZATION.

A LITTLE BIT ABOUT THIS PROJECT. SO HEART DISEASE IS THE LEADING CAUSE OF DEATH GLOBALLY. AFTER THE HEART ATTACK, THE BODY TRIES TO REPAIR THE DAMAGED AREA, BUT WITH SCAR TISSUE. AND THE SCAR TISSUE STRESSES THE REMAINING HEART MUSCLE WHICH OVER TIME CAN LEAD TO HEART FAILURE. SO THE CURRENT STANDARDS OF CARE FOR HEART DISEASE DOES NOT ADDRESS THE COMPLICATIONS OF THE SCAR TISSUE OR ENHANCE ANY OF THE CARDIAC REPAIR.

SO THE PROPOSITION OF THIS PROPOSED THERAPY IS A ONE-TIME TREATMENT OF A DRUG THAT COULD POTENTIALLY ENHANCE THE REPAIR AND/OR DECREASE THE FIBROSIS OR, RATHER, THE SCAR TISSUE THAT FORMS

AFTER A HEART ATTACK AND WOULD POTENTIALLY BE A SIGNIFICANT ADVANCEMENT OVER THE STANDARD OF CARE.

AND HOW THIS PROJECT IS RELEVANT TO CIRM IS THAT THE THERAPY TARGETS THE SCAR FORMING PROGENITOR CELLS.

SIMILAR CIRM PORTFOLIO PROJECTS, THERE'S ANOTHER CLIN1 THAT IS ACTIVE RIGHT NOW USING A DIFFERENT TYPE OF CANDIDATE. SO THESE ARE THE VESICLES DERIVED FROM CARDIAC-DERIVED CELLS. AND THE SECOND PROJECT, I JUST NOTICED THIS, BY THE WAY. I APOLOGIZE. THIS IS A TYPO. THE SECOND PROJECT IN OUR PORTFOLIO IS A CLIN2. THIS A CLINICAL TRIAL PHASE PROJECT ALSO FOR HEART FAILURE, BUT USING HUMAN EMBRYONIC STEM CELL-DERIVED CARDIOMYOCYTES.

PRIOR FUNDING TO THE APPLICANT TEAM. SO THIS APPLICANT TEAM HAS RECEIVED TWO PRIOR AWARDS THAT ARE DIRECTLY RELATED TO THE CURRENT APPLICATION UNDER DISCUSSION. SO THESE WERE DISCOVERY AND TRANSLATIONAL PROJECTS THAT LED DIRECTLY TO THIS CLIN1 THAT IS BEFORE YOU TODAY.

SO FINALLY, THE CLIN1-15399 WAS RECOMMENDED FOR FUNDING BY THE GRANTS WORKING GROUP WITH A UNANIMOUS SCORE OF 1 AND A DEI SCORE OF 10 FROM THE BOARD MEMBERS, AND THE CIRM TEAM CONCURS WITH THE ABOVE RECOMMENDATION FOR A TOTAL AWARD

AMOUNT OF $5,999,998. THANK YOU.

CHAIRMAN IMBASCIANI: THANK YOU. THANK YOU AGAIN, HAYLEY.

I'D LIKE TO HEAR A MOTION TO ACCEPT THE RECOMMENDATION TO FUND.

VICE CHAIR BONNEVILLE: SO MOVED.

CHAIRMAN IMBASCIANI: THANK YOU, MARIA.

DR. SOUTHARD: SECOND.

CHAIRMAN IMBASCIANI: THANK YOU, MARV.

DISCUSSION FROM BOARD MEMBERS ON THIS APPLICATION.

MS. DURON: SORRY. I'M TRYING TO PUT MY HAND UP.

CHAIRMAN IMBASCIANI: I CAN HEAR YOU.

MS. DURON: MY QUESTION, I DON'T KNOW IF IT'S TO HAYLEY, BUT REMIND ME BECAUSE I POSSIBLY HAVE FORGOTTEN THIS FROM A LONG TIME AGO. WHAT IS THE REQUIREMENT OR HOW DO YOU MEASURE THOSE WHO AREN'T REQUIRED TO HAVE CO-FUNDING AND THOSE WHO DO? IT STRIKES ME IN SOME WAYS THAT PEOPLE WHO BRING CO-FUNDING WITH THEM CAN HELP STRETCH OUR DOLLARS AND SHOWS A REAL COMMITMENT. THAT MAY BE A WRONG QUESTION OR I'M POORLY INFORMED, BUT JUST REMIND ME AGAIN WHY.

DR. LAM: SO IT'S DEPENDENT LARGELY ON THE

APPLICANT TYPE. SO NONPROFIT ORGANIZATIONS ARE NOT REQUIRED TO HAVE CO-FUNDING FOR THE CLIN1 STAGE AT THIS TIME. THAT BEING SAID, OBVIOUSLY IT DOESN'T MEAN THAT THEY CAN'T HAVE CO-FUNDING. IT'S JUST NOT REQUIRED.

MS. DURON: RIGHT. AND I WOULD ARGUE THAT MOST OF THE NONPROFITS, I THINK, WHO APPLY ARE FAIRLY LARGE AND HAVE THEIR OWN BIG FUNDING. THESE ARE NOT SMALL, LITTLE ORGANIZATIONS. SO IT'S JUST CURIOUS BECAUSE, LIKE I SAID, WE NEED TO STRETCH OUR DOLLARS. AND SO, ANYWAY, IT'S A THOUGHT. AND I DON'T KNOW IF WE HAVE MORE TIME TO HAVE A CONVERSATION AROUND IT AT SOME POINT IN TIME, BUT I LEAVE IT OPEN FOR DISCUSSION MAYBE AT OUR JUNE MEETING. THANK YOU.

CHAIRMAN IMBASCIANI: OKAY. I DO NOT SEE ANY OTHER HANDS FROM BOARD MEMBERS. I'M GOING TO OPEN IT UP FOR COMMENT FROM THE MEMBERS OF THE PUBLIC WHO WANT TO DISCUSS OR MAKE A COMMENT ON THIS APPLICATION, 15399. IT'S A HEART FAILURE.

MS. MORALEZ: THERE ARE NO HANDS RAISED.

CHAIRMAN IMBASCIANI: THERE ARE NO HANDS RAISED. THANK YOU SO MUCH.

BEN, IF YOU'D DO THE HONORS.

MR. HUANG: YES. THIS IS A MOTION TO

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APPROVE CLIN1-15399 FOR FUNDING.

DAN BERNAL.

MR. BERNAL: AYE.

MR. HUANG: MARIA BONNEVILLE.

VICE CHAIR BONNEVILLE: YES.

MR. HUANG: JUDY CHOU.

DR. CHOU: YES.

MR. HUANG: LEONDRA CLARK-HARVEY.

DR. CLARK-HARVEY: AYE.

MR. HUANG: ANNE-MARIE DULIEGE. YSABEL DURON.

MS. DURON: YES.

MR. HUANG: MARK FISCHER-COLBRIE.

MR. FISCHER-COLBRIE: YES.

MR. HUANG: FRED FISHER.

DR. FISHER: YES.

MR. HUANG: ELENA FLOWERS.

DR. FLOWERS: YES.

MR. HUANG: DAVID HIGGINS.

DR. HIGGINS: YES.

MR. HUANG: VITO IMBASCIANI.

CHAIRMAN IMBASCIANI: YES.

MR. HUANG: STEVE JUELSGAARD.

MR. JUELSGAARD: YES.

MR. HUANG: RICH LAJARA.

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MR. LAJARA: YES.
MR. HUANG: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MR. HUANG: ADRIANA PADILLA.
DR. PADILLA: YES.
MR. HUANG: JOE PANETTA.
MR. PANETTA: YES.
MR. HUANG: MARVIN SOUTHARD.
DR. SOUTHARD: YES.
MR. HUANG: KEVIN XU.
DR. XU: YES.
MR. HUANG: THE MOTION PASSES.
CHAIRMAN IMBASCIANI: MOTION PASSES. THANK YOU, BEN. OKAY.
WE'RE GOING TO MOVE TO THE NEXT ORDER OF BUSINESS. THERE ARE 24 APPLICATIONS BEFORE US SUBMITTED IN CONSIDERATION -- IN RESPONSE, I'M SORRY, TO THE TRANSLATIONAL PROJECTS PROGRAM ANNOUNCEMENT. THESE ARE APPLICATIONS IN THE TRAN CATEGORY. AND I'M GOING TO ALLOW -- LET'S SEE. GIL, WHERE ARE YOU? GIL IS GOING --
DR. SAMBRANO: I'M HERE.
CHAIRMAN IMBASCIANI: THANK YOU.
DR. SAMBRANO: SO LET ME JUST QUICKLY PUT THIS IN PRESENTATION MODE. GOOD MORNING, EVERYONE.

THANK YOU FOR YOUR ATTENTION TO THIS.

I'M GOING TO TAKE YOU THROUGH SOME BACKGROUND ON THE TRAN PROGRAM AS WELL AS GIVE YOU AN EXPLANATION OF THE RECOMMENDATION FROM THE GRANTS WORKING GROUP AS WELL AS CIRM ON THESE APPLICATIONS.

AS ALWAYS, WE START WITH OUR MISSION,

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TO ACCELERATE WORLD-CLASS SCIENCE TO DELIVER TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENTS IN AN EQUITABLE MANNER TO A DIVERSE CALIFORNIA AND WORLD.

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AND AS I TYPICALLY MENTION, THIS IS SOMETHING THAT WE CARRY FORWARD IN OUR GRANTS WORKING GROUP MEETINGS AS WELL SO THAT WE ENSURE THAT EVERYONE IS ON THE SAME PAGE AS WE ENGAGE IN THESE DISCUSSIONS.

THE TRANSLATION PROGRAM FALLS RIGHT IN BETWEEN DISCOVERY AND CLINICAL PROGRAMS THAT WE SUPPORT. THE IDEA IS TO TAKE SINGLE PRODUCT CANDIDATES THAT ARE DEVELOPED EITHER THROUGH CIRM FUNDING OR OTHER SOURCES, TAKE THEM THROUGH KEY TRANSLATIONAL STUDIES, AND HAVE THEM BE READY TO BEGIN THEIR PRE-IND OR IND-ENABLING WORK.

THE PROGRAM SUPPORTS FOUR DIFFERENT PRODUCT TYPES. SO WE CAN HAVE PRODUCTS THAT ARE A THERAPEUTIC, A CELL THERAPY OR GENE THERAPY OR SMALL MOLECULE, FOR EXAMPLE, A DIAGNOSTIC OR A MEDICAL DEVICE OR A TOOL, WHICH CAN BE A RESEARCH TOOL OR A CLINICAL TOOL. EACH OF THESE PRODUCTS HAVE DIFFERENT REQUIREMENTS. AND, THEREFORE, THE TIME ALLOTTED OR ALLOWED FOR THEM TO DEVELOP THEIR TRANSLATIONAL STUDIES VARIES FROM 24 TO 30 MONTHS. AND THE AMOUNT OF FUNDING THAT'S PROVIDED ALSO VARIES BASED ON THE PRODUCT TYPE.

THE GOAL BEHIND ALL OF THESE IS TO GET TO A COMPLETED PRE-IND OR OTHER PRESUBMISSION MEETING

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WITH THE FDA IF THEY FOLLOW A REGULATORY PATH, OR FOR A TOOL TO GET TO A POINT WHERE THEY HAVE THE ABILITY TO TRANSFER THEIR DESIGN TO A MANUFACTURER AND MAKE THEIR TOOL AVAILABLE BROADLY. ALL OF THE PROJECTS THAT COME IN NEED TO BE AT A STATE OF READINESS WHERE THEY HAVE A CLEAR CANDIDATE THAT CAN MOVE THROUGH THESE TRANSLATIONAL STUDIES TO GET TO THAT GOAL.

THE SCIENTIFIC REVIEW CRITERIA THAT ARE USED BY THE GRANTS WORKING GROUP TO ASSESS THESE APPLICATIONS ARE SIMILAR TO WHAT HAYLEY PRESENTED WITH THE CLIN PROGRAM. DOES THE PROJECT HOLD THE NECESSARY SIGNIFICANCE AND POTENTIAL FOR IMPACT? DOES IT HAVE A GOOD RATIONALE? IS IT WELL PLANNED AND DESIGNED? IS IT FEASIBLE? AND DOES THE PROJECT UPHOLD THE PRINCIPLES OF DIVERSITY, EQUITY, AND INCLUSION?

THE SCORING IS A LITTLE DIFFERENT HERE THOUGH. THE SCORING IS ON A SCALE OF 1 TO 100. IF AN APPLICATION RECEIVES A SCORE OF 85 TO 100, THE APPLICATION IS DEEMED TO HAVE EXCEPTIONAL MERIT AND WARRANTS FUNDING. A SCORE BETWEEN 1 AND 84, THE APPLICATION IS NOT RECOMMENDED FOR FUNDING. HOWEVER, IF IT RECEIVES A SCORE BETWEEN 80 AND 84, THE APPLICATION IS NOT RECOMMENDED FOR FUNDING, BUT

MAY SKIP THROUGH THE POSITIVE SELECTION PROCESS. AND WE HAVE ANOTHER TYPO HERE. IT WILL BE ACTUALLY FOR THE NEXT OR FUTURE TRAN COMPETITION. I'LL SPEAK A LITTLE BIT MORE ABOUT POSITIVE SELECTION IN JUST A SECOND.

OF COURSE, APPLICATIONS RECEIVING ANY SCORE CAN REVISE AND RESUBMIT IN FUTURE TRAN COMPETITIONS.

ONE OF THE OTHER THINGS THAT WE'VE IMPLEMENTED INTO THE TRAN REVIEWS IS THE DEI SCORING. SO IN THE LAST COUPLE OF GRANT CYCLES, WE'VE INCLUDED THE DEI SCORING SIMILAR TO WHAT WE DO WITH THE CLINICAL PROGRAM, USING THE SAME DEI SCORE SCALE OF ZERO TO TEN. AND A VERY SIMILAR RUBRIC THAT WE PROVIDE TO OUR BOARD MEMBERS TO HELP GUIDE --

MS. MANDAC: WE LOST GIL. WE JUST LOST CONNECTION. LET'S TRY TO GET HIM BACK.

(PAUSE IN PROCEEDINGS DUE TO TECHNICAL DIFFICULTY.)

MS. MANDAC: HAYLEY, IF YOU'RE COMFORTABLE.

DR. LAM: YES. I JUST WANT TO CONFIRM HE WAS ON -- WHICH SLIDE HE WAS ON.

MS. DURON: HE WAS TALKING ON DEI RUBRIC.

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DR. LAM: THANK YOU. THAT'S WHAT I THOUGHT, BUT I WASN'T A HUNDRED PERCENT SURE. HERE WE GO.

MS. DURON: I ALWAYS REMEMBER THAT ONE.

DR. LAM: LET'S SEE. HOLD ON.

MS. MANDAC: I'LL SEND YOU A SLIDE DECK JUST IN CASE, HAYLEY.

DR. LAM: NO. I HAVE IT. I JUST NEED TO GET IT TO FULL SCREEN MODE. HERE WE GO. THANKS FOR YOUR PATIENCE HERE. ALL RIGHT.

DEI SCORING. SO HOPEFULLY THIS IS FAMILIAR AND GIL WAS JUST TALKING THROUGH IT. THE SCORING SYSTEM IS A ZERO TO TEN WITH A SIMILAR RUBRIC TO THE CLINICAL PROGRAM. AND THE MEDIAN OF ALL THE SCORES DETERMINES THE FINAL DEI SCORING.

AND THE COMPOSITION OF THE GROUP THAT RECOMMENDS THESE APPLICATIONS, AGAIN, IS A GROUP OF UP TO 15 SCIENTIFIC GRANTS WORKING GROUP MEMBERS THAT SCORES ALL THE SCIENTIFIC -- PROVIDES A SCIENTIFIC SCORE FOR ALL APPLICATIONS, THE BOARD MEMBERS WHO PROVIDE A DEI SCORE ON ALL APPLICATIONS, AND AD HOC SPECIALISTS THAT COME ON AND PROVIDE INITIAL SCORING, BUT NOT FINAL SCORES, IN AREAS OF EXPERTISE AS NEEDED FOR INDIVIDUAL APPLICATIONS.

A NOTE ABOUT THE TRANSLATIONAL PROGRAM.

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SO WHEN WE HAVE MORE APPLICATIONS SUBMITTED THAN WE CAN REVIEW IN A GIVEN PANEL, WE CONDUCT WHAT WE CALL POSITIVE SELECTION. SO IN THIS STAGE ALL OF THE GRANTS WORKING GROUP MEMBERS, INCLUDING THE BOARD MEMBERS, CONDUCT A QUICK PREREVIEW OF THE ENTIRE APPLICANT POOL THAT IS SUBMITTED AND SELECT INDIVIDUAL ONES TO ADVANCE TO THE FULL DISCUSSION AND REVIEW.

AFTER THAT HAPPENS, THE CIRM PRESIDENT AND CIRM STAFF WILL ALSO LOOK AT THE REMAINING APPLICATIONS TO DETERMINE IF ANY MERIT A FULL REVIEW, AND THE REMAINDER OF APPLICATIONS ARE NOT CONSIDERED FURTHER.

SO IN THIS PARTICULAR ROUND, A TOTAL OF 50 APPLICATIONS WERE SUBMITTED, AND A TOTAL OF 29 APPLICATIONS ADVANCED TO THE FULL REVIEW STAGE BY THE GRANTS WORKING GROUP.

SO TO SUMMARIZE THE GRANTS WORKING GROUP RECOMMENDATIONS, THE TOTAL NUMBER OF APPLICATIONS RECOMMENDED FOR FUNDING WITH A SCORE OF 85 TO 100 NUMBERED IN 16 WITH A TOTAL APPLICANT REQUEST OF JUST UNDER 60 OR JUST OVER, RATHER, 69 MILLION WITH 42 MILLION IN FUNDS AVAILABLE. AND THERE ARE 11 APPLICATIONS THAT WERE NOT RECOMMENDED FOR FUNDING.

SO FOR EACH AWARD, THE FINAL AWARD AMOUNT

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WILL NOT EXCEED THE AMOUNT APPROVED BY THIS GROUP TODAY.

A NOTE BASED UNDER PROP 14, WE HAVE SOMETHING CALLED MINORITY REPORTS. SO ANY APPLICATION THAT IS NOT RECOMMENDED FOR FUNDING, BUT HAVE 35 PERCENT OR MORE OF THE PANEL RECOMMEND THAT APPLICATION WILL INCLUDE A MINORITY REPORT. AND THIS IS PART OF THE REVIEW SUMMARIES THAT YOU HAVE BEFORE YOU, AND THIS PROVIDES SORT OF A SYNOPSIS OF THE OPINION OF THE REVIEWERS WHO RECOMMENDED THE APPLICATION FOR FUNDING.

SO IN THIS COHORT, THERE WAS ONE APPLICATION WITH A MINORITY REPORT, TRAN1-16158, AND IT ULTIMATELY RECEIVED A SCORE OF 84 WITH REQUESTED FUNDS OF JUST OVER 3 MILLION. AND THE CIRM TEAM IN THIS CASE SUPPORTS THE MAJORITY POSITION TO NOT FUND THIS APPLICATION FOR THIS CYCLE AND RECOMMENDS THE APPLICANT RESUBMIT IN THE NEXT TRANSLATIONAL CYCLE.

SO THE BOARD MEMBERS WITH CONFLICTS OF INTEREST FOR THE TRANSLATIONAL APPLICATIONS. SO AS ALL OF THE APPLICATIONS FOR THE TRANSLATIONAL PROGRAM ARE CONSIDERED TOGETHER, ANYBODY WITH A CONFLICT WITH ANY SINGLE APPLICATION IS CONFLICTED. SO THE LIST FOR THIS PARTICULAR GROUP IS MARIA BONNEVILLE, YSABEL DURON, STEVE JUELSGAARD, AND

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KAROL WATSON.

I THINK I NEED TO SHARE THE OTHER FILE WHICH MAY TAKE A MOMENT OR IF SOMEBODY HAS IT READY AND CAN SHARE IT AS WELL. SO THIS IS THE GRID WITH ALL OF THE APPLICATIONS RECOMMENDED IN GREEN.

AND SO BECAUSE THE TOTAL NUMBER OF APPLICATIONS IN THIS ROUND THAT WERE RECOMMENDED BY THE GRANTS WORKING GROUP EXCEEDS THE BUDGET THAT IS ALLOCATED FOR THE TRANSLATIONAL AWARDS IN THIS FISCAL YEAR, THE CIRM TEAM HAS MADE THE FOLLOWING RECOMMENDATIONS FOR FUNDING TO THE APPLICATION REVIEW SUBCOMMITTEE. SO AS YOU CAN SEE, THE GREEN ONES ARE THE RECOMMENDATIONS FOR FUNDING. AND ESSENTIALLY IT WAS BASED ON THE FUNDS THAT WE HAD. AND THE LINE WAS DRAWN HERE AT TRAN 16192. AND THEN THE ONLY REMAINING APPLICATION THAT COULD FIT IN THE REMAINING FUNDS AVAILABLE WAS, LET'S SEE, 16091.

AND SO WITH THAT, WE WOULD BE ABLE TO FUND THE MOST NUMBER OF APPLICATIONS IN THIS ROUND WITH THE HIGHEST MEDIAN SCORE. SO THAT IS THE RECOMMENDATION THAT THE CIRM TEAM HAS PUT FORTH TO THE APPLICATION REVIEW SUBCOMMITTEE TODAY.

DR. SAMBRANO: I'M BACK. I HAVE NO IDEA WHAT HAPPENED. BUT THANKS FOR PRESENTING, HAYLEY. I DON'T KNOW IF YOU TALKED ABOUT THE APPLICATION

THAT'S AT THE BOTTOM OF THE LIST, WHICH I THINK IS IMPORTANT TO HIGHLIGHT, WHICH IS 16262. SO THAT ONE IS THE ONLY ONE THAT IS SORT OF OUT OF ORDER IN TERMS OF THE SCIENTIFIC RANKING. THAT ONE RECEIVED A SCORE OF 86; HOWEVER, IT GOT A VERY LOW DEI SCORE OF 5. AND SO TYPICALLY THE BOARD MEMBERS ARE SCORING THE DEI SUCH THAT ANYTHING BELOW A 6 IS STRONGLY FELT TO BE ONE THAT NEEDS TO FIX THEIR DEI AND RESUBMIT. AND SO, THEREFORE, THAT'S WHY WE PUT THAT OUT OF ORDER AND PUT THAT IN THE BOTTOM OF THE STILL OVERALL SCIENTIFICALLY RECOMMENDED APPLICATIONS.

THE OTHER THING TO NOTE IS THAT THE BASIS FOR OUR RECOMMENDATION, I THINK HAYLEY PROBABLY ALREADY STATED THIS, IS BASED ON THE SCIENTIFIC RANK OF THE APPLICATIONS. SO IT IS GOING THROUGH THE TOP NINE. ONCE YOU GET TO THE TOP NINE, WE CAN'T FUND ANYTHING ELSE IN ADDITION TO THAT UNTIL YOU SKIP OVER TO THE ONE APPLICATION THAT WAS MENTIONED. AND SO THAT IS THE BASIS FOR THE RECOMMENDATION.

THE OTHER THING I WANT TO NOTE IS THAT ALL OF THE APPLICATIONS THAT DON'T GET FUNDED HAVE THE OPPORTUNITY TO SUBMIT AGAIN. SO THE NEXT APPLICATION DEADLINE IS IN JULY, SO IT'S BASICALLY JUST AROUND THE CORNER. SO APPLICATIONS THAT END UP

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NOT GETTING FUNDED WILL SKIP OVER THE POSITIVE SELECTION PROCESS AND WILL BE ABLE TO IF THEY RECEIVED A FUNDING RECOMMENDATION. SO THE GRANTS WORKING GROUP WILL ALSO, OF COURSE, KNOW THAT THESE WERE PREVIOUSLY RECOMMENDED AND, THEREFORE, HAVE A HIGH LIKELIHOOD OF BEING AMONG THE RECOMMENDED GROUP AGAIN. SO THAT IS IMPORTANT TO KNOW AS YOU GET INTO YOUR DELIBERATION OF THESE APPLICATIONS. SO I THINK THAT IS IT FROM MY END.

CHAIRMAN IMBASCIANI: THANK YOU, GIL, AND THANK YOU, HAYLEY, FOR DOING YEOMAN'S SERVICE IN GIL'S ABSENCE. WE ALL BENEFITED FROM THE EXPLANATION OF WHY SOME OF THE APPLICATIONS RECOMMENDED, THERE'S A GAP BETWEEN THE NINE AND THE ONE.

SO I'M GOING TO OPEN THE FLOOR. THIS IS WHAT'S GOING TO HAPPEN. I'M GOING TO ASK FOR A MOTION AND FOLLOW THAT BY COMMENT FROM THE BOARD. IT'S OUR USUAL MANNER. AND THEN FOLLOW THAT BY PUBLIC COMMENT. I SAW A HAND THERE. DAVID, WHERE ARE YOU?

DR. FISHER: MOTION TO APPROVE THE GREEN FUNDED LIST.

CHAIRMAN IMBASCIANI: SORRY, FRED. DAVID, I RECOGNIZED YOU FIRST AND YOU WERE ON MUTE.

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DR. HIGGINS: YES. I AM OFF MUTE NOW. I DON'T HAVE VIDEO, BUT I HAVE AUDIO. SO MAY I SPEAK? I DON'T WANT TO EDGE ANYBODY OUT.

I THINK WHAT I'M WITNESSING HERE IS WE'RE STRUGGLING WITH WE'VE GOT MORE FUNDABLE GRANTS THAN WE'VE GOT MONEY TO FUND THEM FOR THIS PARTICULAR CYCLE. SO WE'RE GOING TO KICK THE CAN DOWN THE ROAD A LITTLE BIT UNTIL JULY.

MY FIRST COMMENT IS IS THAT CORRECT? AND THEN I'D LIKE TO FOLLOW UP ON THAT. DID I SAY THAT CORRECTLY?

DR. SAMBRANO: SO THE RECOMMENDATION IS TO FUND THE ONES THAT ARE IN THE BRIGHT GREEN BECAUSE, AS YOU SAID AND YOU ARE CORRECT, THAT WE CAN ONLY FUND A LIMITED AMOUNT OF WHAT'S RECOMMENDED BECAUSE OUR BUDGET DOESN'T OTHERWISE ALLOW IT. IN JULY THERE IS ANOTHER APPLICATION DEADLINE. SO THOSE THAT DO NOT GET FUNDED HAVE THE OPPORTUNITY TO COME BACK, MEANING THEY CAN RESUBMIT THEIR APPLICATION. BUT GIVEN WHERE THEY ARE ALREADY, THE GRANTS WORKING GROUP IS AWARE OF THE VALUE OF THESE APPLICATIONS. SO I THINK THEY ARE LIKELY TO SCORE HIGH AGAIN WHERE THEY ARE LIKELY TO BE RECOMMENDED. SO IN JULY THOSE THAT DON'T GET FUNDED CAN RE-APPLY.

DR. HIGGINS: SO HAVING SAID THAT, GIL,

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THANK YOU FOR THIS SUMMARY. AS I OBSERVE IT, I THINK WE'RE DEVIATING A LITTLE BIT FROM OUR NORMAL PATH TO APPROVING GRANTS. AND SO WHAT I'D LIKE TO DO TO KEEP US CLEAN IS CONSIDER A MOTION THAT WOULD SPECIFICALLY STATE THAT WE MOVE TO FUND THE APPLICATIONS THAT HAVE BEEN RECOMMENDED BY CIRM STAFF, BUT THAT WE SPECIFICALLY DON'T FUND THOSE THAT ARE NOT RECOMMENDED BY CIRM STAFF. SO JUST TO MAKE IT PERFECTLY CLEAR AS TO WHAT WE'RE DOING AND WHY WE'RE DOING IT INTENTIONALLY. DOES THAT MAKE SENSE? DOES THAT MATTER? IS THAT REDUNDANT?

MR. HUANG: I THINK THAT MAKES SENSE. IT ALSO ALLOWS -- IF WE DO DAVID'S MOTION, IT ALLOWS FOR ALL THE PUBLIC COMMENTS TO OCCUR AT ONCE BECAUSE EVERY ONE -- ALL THE APPLICATIONS WOULD FALL UNDER THAT ONE MOTION. SO I DO THINK IT'S SIMPLER PROCESSWISE IF THE BOARD CONCURS.

CHAIRMAN IMBASCIANI: GOOD POINT. SO ONCE AGAIN, I'M GOING TO RESTATE YOUR MOTION. I HAVEN'T HEARD A SECOND YET. DAVID HIGGINS PROPOSES THAT WE FUND EVERYTHING THAT THE CIRM INTERNAL TEAM RECOMMENDED TO BE FUNDED AND NOT TO FUND THOSE THAT WERE NOT RECOMMENDED FOR FUNDING BY THE SAME TEAM.

DR. FISHER: SECOND.

CHAIRMAN IMBASCIANI: FRED FISHER SECONDS.

THE FLOOR IS NOW OPEN FOR DISCUSSION ON THE MOTION FROM THE BOARD MEMBERS.

MS. MANDAC: JOE HAD HIS HAND RAISED.

CHAIRMAN IMBASCIANI: JOE.

MR. PANETTA: THANK YOU. I APOLOGIZE FOR ALMOST HAVING LOST MY VOICE HERE. SO I HOPE YOU CAN UNDERSTAND WHAT I'M SAYING.

SO JUST FOLLOWING ON TO WHAT DAVID WAS SAYING, WHAT I'M THINKING ABOUT IS THAT IF WE PLACE ALL OF THOSE OTHER APPLICATIONS THAT SCORED HIGH ENOUGH TO BE FUNDED, BUT THAT WE DON'T HAVE THE FUNDS TO BE ABLE TO MOVE ON, WHAT IS THE LIKELIHOOD THAT WE'RE GOING TO END UP IN THE SAME POSITION NEXT TIME AROUND WHERE WE'VE GOT MORE APPLICATIONS THAN WE HAVE THE FUNDS TO BE ABLE TO FUND? DOES THIS JUST CREATE THIS REPETITIVE CYCLE WHERE WE'RE PUSHING THINGS DOWN THE ROAD?

DR. SAMBRANO: WELL, WE START A NEW BUDGET YEAR IN JULY. AND TYPICALLY WE HAVE ENOUGH BUDGET FOR TWO CYCLES. IT'S UNCLEAR HOW MANY APPLICATIONS WE'RE GOING TO GET FOR THIS NEXT CYCLE; BUT IF THE TREND CONTINUES, WE COULD BE IN A SIMILAR SITUATION WHERE WE MAY NOT BE ABLE TO FUND EVERYTHING THAT GETS RECOMMENDED.

THIS IS THE FIRST TIME THAT WE'VE HAD THIS

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MANY APPLICATIONS AND ALSO THE FIRST TIME THAT WE'VE HAD TO FACE THIS ISSUE WHERE WE HAVE NOT SUFFICIENT BUDGET TO DO SO. SO IT'S HARD TO KNOW, BUT IT IS POSSIBLE THAT WE MAY FACE THE SAME SITUATION.

CHAIRMAN IMBASCIANI: OKAY. THANK YOU. THANK YOU, JOE, AND YOUR BASSO PROFONDO VOICE. IT'S COMING THROUGH PERFECTLY CLEAR.

LOOKING FOR OTHER BOARD MEMBER COMMENT ON THE MOTION. HELP ME, LANA. I DON'T SEE THE ENTIRE GALLERY PERHAPS.

MS. MANDAC: NO HANDS RAISED.

DR. CLARK-HARVEY: THIS IS LEONDRA. I APOLOGIZE. I'M OFF CAMERA FOR THE MOMENT. POINT OF ORDER. WAS THERE ANOTHER MOTION ON THE FLOOR? I UNDERSTAND WE'RE DISCUSSING A PROPOSAL FROM MR. HIGGINS, BUT WAS THERE ALREADY A MOTION ON THE FLOOR? JUST TRYING TO GET CLEAR ON THAT PROCEDURALLY.

MR. HUANG: FRED'S MOTION WAS NOT SECONDED. SO --

CHAIRMAN IMBASCIANI: AND FRED SECONDED DAVID'S MOTION. SO I DEDUCE FROM THAT THAT HIS INTENTION WAS SUBSUMED UNDER DAVID'S.

DR. CLARK-HARVEY: THANK YOU FOR THE CLARITY.

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CHAIRMAN IMBASCIANI: THANKS FOR CLARIFYING WITH YOUR QUESTION, LEONDRA.

LISTEN, I'M GOING TO OPEN THE FLOOR NOW TO PUBLIC COMMENT, BUT BOARD MEMBERS, OF COURSE, HAVE THE OPPORTUNITY TO RAISE YOUR HAND AT ANY POINT ALSO.

SO BECAUSE OF THE VOLUME OF PUBLIC COMMENT, I'M GOING TO ASK THE MEMBERS OF THE PUBLIC WHEN THEY USE THE MICROPHONE TO LIMIT THEMSELVES TO TWO MINUTES. AND I'M GOING TO RELY ON --

MR. HUANG: SORRY. SO BECAUSE WE HAVE PEOPLE, WE HAVE PEOPLE ONLINE AND WE HAVE PEOPLE IN PERSON, I THINK WE'RE GOING TO MANAGE PUBLIC COMMENT BY HANDLING THE FOLKS IN PERSON AT THE CIRM HEADQUARTERS, AND THEN WE'LL TRANSITION TO THE ONLINE PUBLIC COMMENTS.

SO CLAUDETTE WILL KEEP TIME, AND I'LL CALL JUST IN ORDER OF SIGN-IN. MAX WEISS.

MS. MANDAC: MAX, YOU SHOULD SEE A TIMER UP ON THE BOARD, SO IT WILL HELP YOU KEEP THE TIME. LET ME KNOW WHEN YOU'D LIKE TO START.

CHAIRMAN IMBASCIANI: DO WE HAVE CAMERA ON OUR SPEAKERS?

MS. MANDAC: YES.

MASTER WEISS: I CAN START NOW. I WOULD

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LIKE TO TALK ABOUT THE GRANT FOR THE FUNDING OF GAUCHER. THIS DISEASE HAS AFFECTED ME PERSONALLY. IT'S BEEN A BURDEN ON MY LIFE. EVERY TIME I HAVE TO GO, I AM REMINDED THAT I WILL HAVE TO LIVE WITH THIS FOR THE REST OF MY LIFE, THAT I MAY NOT BE ABLE TO ACCOMPLISH EVERYTHING THAT I WANT TO BECAUSE OF THIS DISEASE.

AND THIS CURE, IT'S IN ITS FINAL STAGES, WOULD LIFT THIS BURDEN OFF MY SHOULDERS, ALLOW ME TO DO WHAT I WISH TO DO, TO BE FREE TO ACCOMPLISH MY GOALS, TO HELP THE WORLD.

I WOULD REALLY LIKE THIS TO BE FUNDED BECAUSE THIS DISEASE HAS IMPACTED ME PERSONALLY AND MANY OTHERS AS WELL. IF I WAS ABLE TO BE CURED FROM THIS DISEASE, I WOULD BE ABLE TO DO SO MUCH MORE IN MY LIFE THAN WHAT I CAN NOW BEING BURDENED BY MY BIWEEKLY VISITS TO DELAY THE EFFECTS OF THIS DISEASE. THANK YOU.

MR. HUANG: THANK YOU, MAX. THAT IS APPLICATION 16026, AND IT IS IN THE FUNDING RANGE.

CHAIRMAN IMBASCIANI: THANK YOU FOR THAT.

MR. HUANG: NEXT SPEAKER IS DR. GOMEZ. NO. OKAY. MR. WEISS.

MR. WEISS: DISTINGUISHED MEMBERS OF THE BOARD, I'M MAX'S FATHER. AND WE HAVE SUFFERED

THROUGH GAUCHER ALL OF MAX'S LIFE OBVIOUSLY. IT WAS A DIFFICULT DECISION GIVEN WHAT'S GOING ON. IT WAS A DIFFICULT DECISION TO GO THROUGH AND HAVE MAX. HE'S A WONDER. AND THIS FUNDING OF DR. GOMEZ, SHE'S AT THE LAST STAGE OF THIS PROJECT. THIS GOES TO CLINICAL TRIALS AFTERWARDS. THERE'S NO SENSE GIVING UP ON THIS PROJECT. WE NEED TO COMPLETE IT. THANK YOU VERY MUCH.

CHAIRMAN IMBASCIANI: THANK YOU.

MR. HUANG: DR. MCMAHON FROM REVIR THERAPEUTICS.

DR. MCMAHON: THANK YOU. DEAR COMMITTEE MEMBERS, I'M A DIRECTOR OF BIOLOGY AT REVIR THERAPEUTICS, A CALIFORNIA-BASED COMPANY COMMITTED TO DEVELOPING TREATMENTS FOR HUNTINGTON'S DISEASE. FROM INTERACTIONS WITH HD PATIENTS AND PATIENT FOUNDATIONS, I AM AWARE OF THE HIGH UNMET MEDICAL NEED FOR NEW TREATMENTS FOR HUNTINGTON'S DISEASE AND OF THE SUFFERING AND DEVASTATION HD PATIENTS AND FAMILIES ENDURE.

AND TODAY I WOULD LIKE TO READ A LETTER FROM MRS. THERESE CRUTCHER-MARIN, A CALIFORNIA RESIDENT AND PRESIDENT OF THE HUNTINGTON DISEASE SOCIETY OF AMERICA, BAY AREA CHAPTER. SHE'S UNABLE TO ATTEND TODAY AS SHE'S ATTENDING THE ANNUAL

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CONVENTION, BUT THE LETTER DETAILS HER SUPPORT FOR REVIR THERAPEUTICS' APPLICATION.

AND I HOPE FROM HEARING THERESE'S STORY, THAT THE ARS WILL RECONSIDER FUNDING OF OUR PROPOSAL.

"I AM PRESIDENT OF THE HUNTINGTON DISEASE SOCIETY OF AMERICA, SAN FRANCISCO BAY AREA CHAPTER, AUTHOR, HUNTINGTON DISEASE ADVOCATE, BLOGGER, AND RETIRED HEALTHCARE PROFESSIONAL. I AM WRITING IN SUPPORT OF REVIR THERAPEUTICS' APPLICATION TO SECURE FUNDING FOR HUNTINGTON'S DISEASE. THE FUNDING FROM CIRM WILL HELP MOVE REVIR IN DEVELOPING A CURE FOR HUNTINGTON'S DISEASE.

"MY FAMILY HAVE SUFFERED -- FIVE GENERATIONS HAVE SUFFERED FROM HUNTINGTON'S DISEASE. I WATCH MY THREE SISTER-INLAWS SUFFER AND THE STRESS MY FAMILY ENDURED FROM MY HUSBAND'S UNKNOWN GENE STATUS. THE MOTHER OF THESE FOUR SIBLINGS WAS PLACED IN NAMPA STATE HOSPITAL. AND BECAUSE HER CHOREA WAS UNCONTROLLABLE, SHE WAS RESTRAINED AND STRANGLED TO DEATH.

"FUNDING FROM CIRM IS CRITICAL TO SUPPORT REVIR EFFORT TO ADVANCE THE PROGRAM TO THE CLINIC AS SOON AS POSSIBLE. MY FAMILY CONSIDERS CIRM'S APPROVAL OF REVIR APPLICATION AS A GIFT TO ALL HD

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FAMILIES IN CALIFORNIA. THANK YOU."

CHAIRMAN IMBASCIANI: THANK YOU VERY MUCH.

MR. HUANG: I'M GOING TO SKIP JUST TO KEEP IT ON THE SAME AWARD.

DR. YUE: THANK YOU. OUR MANAGER TALK ABOUT REVIR EFFORT TO TREAT HUNTINGTON DISEASE. I WILL KEEP MY SPEECH SIMPLE. I JUST WANT TO REALLY EMPHASIZE THAT REVIR IS A SMALL START-UP, TWO YEARS OLD, CALIFORNIA BASED. AND OUR MISSION REALLY IS TO DEDICATE OUR RESOURCE TO DEVELOP A NOVEL THERAPEUTIC TO TREAT MANY NEURODEGENERATIVE DISEASE, INCLUDING HUNTINGTON. AND FOR HUNTINGTON WE ACTUALLY HAVE A VERY COMPREHENSIVE DISEASE STRATEGY TO TARGET DISEASE CAUSAL MUTATION. AND (UNINTELLIGIBLE) COVERED BY OUR PROPOSAL, TRAN1-160730, IS ONE MOLECULE TO REALLY DOWN REGULATE THE HUNTINGTON MUTANT RNA. AND WE THINK THAT THIS THERAPY AND OTHER THERAPY WE ARE CURRENTLY DEVELOPING WILL HAVE A TRANSFORMING KIND OF IMPACT TO THE HUNTINGTON PATIENT. AND THE SUPPORT FROM CIRM IS REALLY CRITICAL FOR US TO PUSH FORWARD TO DEVELOP OTHER MOLECULE, INCLUDING THIS ONE. AND WE REALLY THANK YOU FOR YOUR KIND OF REVIEW.

AND ON THE OTHER HAND, I THINK -- I UNDERSTAND THE LIMITATIONS ABOUT IT; BUT ON THE

OTHER HAND, WE PROBABLY WILLING TO OFFER -- WE CAN MATCH THE GAP IN TERMS OF THE FUNDING FOR THE PARTICULAR ROUND. THIS IS OPTION FOR THE BOARD TO CONSIDER. THANK YOU.

MR. HUANG: DR. SUKOMOTO. OKAY. AND DR. WEISSMAN.

DR. WEISSMAN: I'M IRV WEISSMAN, THE PRINCIPAL INVESTIGATOR OF THIS GRANT. IN 1988 WE FOUND HOW TO ISOLATE PURE, THE ONE IN A 100,000 CELLS IN THE BLOOD-FORMING BONE MARROW. THAT IS THE STEM CELL. ALL OF THE OTHER CELLS, WHEN YOU TRANSPLANT THEM, HAVE A FINITE LIFESPAN, BUT THE STEM CELL BY SELF-RENEWAL CAN LAST FOR THE LIFE OF THE RECIPIENT. ONE TREATMENT FOR LIFE.

IN 1992 WE PUBLISHED THE HUMAN BLOOD-FORMING STEM CELL AT A COMPANY I STARTED CALLED SYSTEMICS. WE DID A CLINICAL TRIAL FOR WOMEN WITH METASTATIC BREAST CANCER. SO THAT MEANS BEYOND THE BREAST, BEYOND THE LYMPH NODES, BUT SOMEPLACE, USUALLY THE BONE. WE GAVE THEM ESSENTIALLY A LETHAL DOSE OF COMBINATION CHEMOTHERAPY AND RESCUED THEM WITH THEIR PURE BLOOD-FORMING STEM CELLS. AND WE VALIDATED THERE WERE NO CANCER CELLS IN IT.

ALL OF THE OTHER TRANSPLANTS HAVE BEEN WITH MOBILIZED BLOOD. ALTHOUGH THEY CALL THEM STEM

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CELL TRANSPLANTS, MOST OF THEM HAVE CANCER CELLS IN THEM.

WHAT WE FOUND WHEN WE PUBLISHED IN 2012 IS THAT WE CHANGED THE MEDIAN SURVIVAL OF WOMEN FROM TWO YEARS WITH EITHER PALLIATIVE INTENSE THERAPY OR MOBILIZED BLOOD RESCUE TO TEN YEARS WITH CANCER FREE STEM CELLS. WE CHANGED THE SURVIVAL BEYOND 15 YEARS, CANCER FREE SURVIVAL, FROM ZERO WITH PALLIATIVE CARE, ZERO WITH MOBILIZED BLOOD TRANSPLANTS TO 33 PERCENT.

NOW AT 26 YEARS LATER, THE PEOPLE WHO WERE CURED BEYOND THE 15 YEAR MADE IT. I WANT TO POINT OUT THAT --

MS. MANDAC: THANK YOU SO MUCH, DR. WEISSMAN. UNFORTUNATELY THE TIME IS UP.

MR. HUANG: THAT'S EVERYBODY ON-SITE.

MS. MANDAC: SO WE ARE GOING TO MOVE ON TO THE ZOOM ROOM. WE'LL CONTINUE ON WITH WEISSMAN'S APPLICATION. SO TAL RAVEH, YOU HAVE TWO MINUTES. TAL. YOU WILL HAVE TO UNMUTE.

DR. RAVEH: GOOD MORNING. I WOULD LIKE TO ALLOW JOE GANTZ TO START BEFORE ME BECAUSE WE BOTH WANT TO COMMENT ON THE SAME APPLICATION.

MS. MANDAC: ALL RIGHT. JOE, YOU HAVE THE FLOOR. YOU'RE SHOWING A WHITEBOARD, JOE.

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(PAUSE IN PROCEEDINGS.)

DR. RAVEH: MAYBE I'LL TRY TO GET STARTED.

CHAIRMAN IMBASCIANI: WE CAN GIVE HIM SOME EXTRA TIME TO GET STARTED.

DR. RAVEH: I'M READY. I'D LIKE TO SHARE A FILM THAT JOE GANTZ CREATED THAT DESCRIBES THE CLINICAL TRIAL, THE ONLY TIME THAT PURIFIED HUMAN HEMATOPOETIC STEM CELLS WERE TRANSPLANTED TO WOMEN THAT SUFFERED FROM METASTATIC BREAST CANCER AND TO RESCUE THEIR BLOOD FORMATION AFTER HIGH-DOSE CHEMO.

(A VIDEO WAS THEN PLAYED, NOT REPORTED NOR HEREIN TRANSCRIBED. THE VIDEO CAN BE VIEWED ON THE FOLLOWING LINK: HTTPS:/VIMEO.COM877689268065B9CF006?SHARE=COPY.)

MS. MANDAC: TAL, IT IS TIME. SO THAT WAS TIME. YES, WE DID SEE A PART OF THE VIDEO, JOE.

DR. GANTZ: OKAY.

(THE ABOVE VIDEO WAS CONTINUED FROM PREVIOUS SPEAKER.)

SO THIS CLINICAL TRIAL WAS FOLLOWED IN MY FILM "ENDING DISEASE" WHICH I RELEASED FOUR YEARS AGO. AND IT'S A CLINICAL TRIAL THAT HAS ALREADY TAKEN PLACE AND HAD TREMENDOUS SUCCESS. AND I'M JUST VERY HOPEFUL THAT IRV WILL GET THE CHANCE TO FOLLOW UP WITH THIS AND CONTINUE THIS TRIAL TO SAVE

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LIVES. AND THANK YOU FOR YOUR TIME.

MS. MANDAC: THANK YOU, JOE.

NEXT UP WE DO HAVE DR. PAUL AUGUST. TO FOLLOW HIM WILL BE SERGUI PASCA. PAUL, YOU HAVE THE FLOOR.

DR. AUGUST: GREAT. THANK YOU VERY MUCH. I APPRECIATE EVERYBODY'S OPPORTUNITY TO SPEAK TODAY. I'M PAUL AUGUST, REVIR THERAPEUTICS CHIEF SCIENTIFIC OFFICER. REVIR IS A CALIFORNIA COMPANY COMMITTED TO DEVELOPING THERAPEUTIC TREATMENTS FOR HUNTINGTON'S DISEASE. AND WE BELIEVE THAT OUR PROPOSAL FITS REALLY WELL WITH THE GOALS OF CIRM'S TRANSLATIONAL PROGRAM.

I'D LIKE TO TAKE THE OPPORTUNITY TO CLARIFY ON SOME POINTS HIGHLIGHTED IN THE UNANIMOUS POSITIVE REVIEW OF OUR PROPOSAL BY THE GRANTS WORKING GROUP. ONE IS YOU'VE SEEN IN OUR LETTERS OF SUPPORT, WE HAVE UNWAVERING SUPPORT FROM HUNTINGTON DISEASE PATIENT FOUNDATIONS SUCH AS THE HUNTINGTON'S DISEASE SOCIETY OF AMERICA AND CHDI, WHICH YOU'LL HEAR FROM DOUG MCDONALD SHORTLY.

WE UNDERSTAND THAT WE ARE JUST AT THE BORDER OF THE FUNDING CUTOFF. AND WE WOULD LIKE TO IMPLORE THE ICOC TO FUND OUR APPLICATION GIVEN ITS MERITS FOR FOCUSING ON A DEVASTATING DISEASE,

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SUPPORT FROM PATIENT FOUNDATIONS, AND SOME OF THE CLARIFICATIONS.

FIRSTLY, THERE WAS A CONCERN RAISED BY THE -- ABOUT OUR CANDIDATE'S EFFICACY IN PRECLINICAL MODELS. AND I WANT TO ASSURE THE COMMITTEE THAT WE HAVE CONFIRMED OUR CANDIDATE IS EFFECTIVE IN THE FULLY HUMANIZED BACK HD MOUSE MODEL OF HUNTINGTON'S DISEASE. AND ADDITIONALLY, OUR CANDIDATE HAS SHOWN PROMISING RESULTS IN HUMAN PRECLINICAL MODELS, SUCH AS HUNTINGTON'S DISEASE PATIENT IPSC'S. AND WE WILL STRENGTHEN THAT IN THE FUTURE.

SECONDLY, ARTIFICIAL INTELLIGENCE WAS RAISED AS AN OPPORTUNITY TO ANALYZE OUR SPLICING DATA. AND I WANT TO COMMUNICATE THAT WE HAVE A DEDICATED GROUP OF COMPUTATIONAL BIOLOGISTS WHO ARE WORKING TO IDENTIFY THE MOST INFORMATIVE ANIMAL SPECIES FOR OUR TOX STUDIES, ENSURING THE USE OF THE TRANSGENOMICS DATA.

IN ADDITION, I WANT TO SAY THAT WE ARE BROADENING OUR CLINICAL TOXICITY ASSESSMENTS AS COMMUNICATED IN THE FEEDBACK. THESE WERE THE ONLY CONCERNS THAT WERE RAISED BY THE REVIEWERS, AND WE WANT THANK YOU FOR YOUR SUPPORT.

MS. MANDAC: THANK YOU, DR. AUGUST. SO THIS WAS FOR TRAN1-16070, WHICH WAS PART OF THE

APPLICATIONS NOT RECOMMENDED FOR FUNDING BY THE CIRM TEAM. NEXT WILL BE DR. SERGUI PASCA ON TRAN1-16236, ALSO NOT RECOMMENDED FOR FUNDING BY THE CIRM TEAM. TO FOLLOW WILL BE KATJA WEINACHT. SO, DR. PASCA, YOU HAVE THE FLOOR.

DR. PASCA: THANK YOU SO MUCH FOR THE OPPORTUNITY TO SPEAK TODAY. I JUST WANT TO TAKE TWO MINUTES TO TELL YOU A LITTLE BIT ABOUT THE RATIONALE AND THE BROADER IMPLICATION FOR OUR TRAN1 APPLICATION FOR TIMOTHY SYNDROME. I'M A PROFESSOR OF PSYCHIATRY AT STANFORD. AND I WANT TO POINT OUT THAT ALTHOUGH PSYCHIATRIC DISORDERS AFFECT ONE IN FIVE INDIVIDUALS WORLDWIDE AND CAUSE IMMENSE SUFFERING, THE NUMBER OF APPLICATIONS, TRANSLATIONAL APPLICATIONS, FOR PSYCHIATRIC DISORDERS ON THE RECOMMENDED FUNDING LIST, IT'S VERY, VERY LOW. AND THIS, OF COURSE, IS NOT A SURPRISE AS THESE CONDITIONS ARE INCREDIBLY COMPLEX. AND DEVELOPING THERAPEUTICS FOR PSYCHIATRIC DISORDERS HAS BEEN MORE CHALLENGING THAN DEVELOPING THERAPEUTICS IN ANY OTHER BRANCH OF MEDICINE.

BUT AS YOU CAN SEE, OUR PROPOSAL WAS VERY POSITIVELY EVALUATED WITH CONCERNS ABOUT HOW RARE THE CONDITION ACTUALLY IS. I WANT TO EMPHASIZE THAT AUTISM, WHICH TIMOTHY SYNDROME IS RARE FORM OF

AUTISM, IS NOT ONE SINGLE DISEASE, BUT A COLLECTION OF INDIVIDUALLY RARE CONDITIONS. AND I DO BELIEVE THAT IF WE WERE TO MAKE PROGRESS IN PSYCHIATRY, WE'RE GOING TO NEED TO FIRST TACKLE THESE RARE CONDITIONS.

WE ARE AT A CRITICAL POINT IN PSYCHIATRY. AS FOR THIS CONDITION, FOR TIMOTHY SYNDROME, ONE OF THE HIGHEST PENETRANT FORMS OF AUTISM AND EPILEPSY, WE HAVE NOW GATHERED ENOUGH BIOLOGICAL INFORMATION THROUGH HUMAN STEM CELL MODELS, ORGANOIDS, ASSEMBLOIDS, AND TRANSPLANTATION MODELS, THAT THE THERAPEUTIC OPPORTUNITY JUST BECAME CLEAR. THIS WORK WAS JUST PUBLISHED A COUPLE OF WEEKS AGO ON THE COVER OF *NATURE* AND DEMONSTRATED FOR THE FIRST TIME A MULTILEVEL APPROACH OF RESTORING DEFECTS IN HUMAN NEURONS.

I NOTE THERE'S NOT ENOUGH TIME, BUT THERE IS A TIMELINESS TO OUR PROJECT SINCE CHILDREN WITH TIMOTHY SYNDROME ARE BEING DIAGNOSED MORE READILY, BUT THEY'RE ALSO DYING YOUNG. JUST IN THE LAST 18 MONTHS, AS I HAVE TRAVELED TO FIND MOST OF THESE PATIENTS, AT LEAST FIVE HAVE ACTUALLY DIED. SO, IN CONCLUSION, I JUST HOPE THAT THE BOARD WILL RECONSIDER --

MS. MANDAC: I'M SORRY. THE NEXT IN LINE

WILL BE DR. KATJA WEINACHT ON TRAN1-16025. TO FOLLOW WILL BE JONATHAN BLUM. SO DR. WEINACHT'S IS ONE OF THE APPLICATIONS NOT CURRENTLY IN THE PILE RECOMMENDED FOR FUNDING. DR. WEINACHT, YOU HAVE THE FLOOR. AND APOLOGIES IF I BUTCHERED YOUR NAME.

DR. WEINACHT: NO. NO. NOT AT ALL. THANK YOU VERY MUCH. KATJA WEINACHT. I'M A PEDIATRIC STEM CELL TRANSPLANTER AT STANFORD SCHOOL OF MEDICINE. AND I APOLOGIZE FOR ANY BACKGROUND NOISE. I'M IN VANCOUVER AT THE INTERNATIONAL SOCIETY FOR CELL THERAPY WHERE I JUST PRESENTED THIS WORK.

SO MY LABORATORY HAS DEVELOPED AN ENTIRELY NEW STRATEGY FOR A T-CELL IMMUNOTHERAPY. T-CELL IMMUNOTHERAPIES ARE THE MOST POWERFUL IMMUNOTHERAPIES. AND THE TYPE OF T-CELL IMMUNOTHERAPY YOU KNOW ARE THE CAR-T CELLS, THE ONE WHERE YOU ENGINEER T-CELLS IN A DISH. AND IT IS THE EXACT SAME TYPE OF T-CELL THAT YOU ENGINEER. MY LABORATORY HAS TAKEN A DIFFERENT APPROACH. WE USE STEM CELLS TO ENGINEER THE ORGAN THAT MAKES T-CELLS. AND SO WE MAKE T-CELLS THE WAY THE BODY DOES IT, T-CELLS THAT CAN DO ANYTHING THE HUMAN BODY NEEDS.

YOU MAY ASK DO I NEED MY T-CELL? WHO IS THIS? WE HAVE PROPOSED IT FOR CHILDREN WITH GENETIC

DEFECTS WHO CANNOT MAKE T-CELLS. BUT EVERY IMMUNOCOMPROMISED PATIENT NEEDS THIS. THIS IS A PLATFORM TECHNOLOGY, PATIENTS WITH CANCER, PATIENTS UNDERGOING CHEMOTHERAPY, PATIENTS OF STEM CELL TRANSPLANTS, PATIENTS WITH HIV. AND TRULY AS WE AGE, WE LOSE OUR CAPACITY TO MAKE NEW T-CELLS. SO THIS IS A PLATFORM TECHNOLOGY THAT WILL REALLY BENEFIT ALL OF US.

AND TO ESTABLISH SOMETHING ENTIRELY NOVEL, WE NEED FUNDING, THE TYPE OF HIGH RISK FUNDING THAT CIRM SET OUT TO DO TO ADVANCE ENTIRELY NOVEL THERAPIES. SO TODAY I RESPECTFULLY ASK THE ICOC COMMITTEE TO EXAMINE THE PORTFOLIO OF EXISTING T-CELL THERAPIES AND TO MAKE A CONSCIOUS DECISION TO INVEST IN SOMETHING THAT IS ENTIRELY NOVEL. AND THAT IS TRULY A WONDERFUL RETURN ON INVESTMENT. IT CAN BENEFIT ALL OF US. AND I'M CONFIDENT IT CAN WRITE THE NEXT CHAPTER OF IMMUNOTHERAPIES. THANK YOU FOR YOUR ATTENTION.

MS. MANDAC: THANK YOU VERY MUCH, DR. WEINACHT. SO NEXT WE WILL HAVE JONATHAN BLUM TO BE FOLLOWED BY SAM ALWORTH. BOTH WILL BE SPEAKING ON TRAN1-16013, AN APPLICATION THAT HAS BEEN RECOMMENDED FOR FUNDING BY THE CIRM TEAM. JONATHAN, YOU HAVE THE FLOOR.

DR. BLUM: THANK YOU FOR THIS OPPORTUNITY TO SPEAK. I WAS DIAGNOSED WITH ALS IN 2020, SHORTLY AFTER I RETIRED FROM MY WORK AS AN INFECTIOUS DISEASE PHYSICIAN. I WAS ASKED BY EVERYTHING ALS, AN ADVOCACY GROUP, TO COMMENT ON THIS GRANT SPECIFICALLY REGARDING WHETHER INTRATHECAL THERAPY WOULD BE ACCEPTABLE TO ALS PATIENTS.

FIRST, I WANT TO MENTION THAT I'M RECEIVING NO COMPENSATION WHATSOEVER FOR MY APPEARANCE HERE. IN ADDITION, I WAS ASKED TO SPEAK AND I AGREED TO DO SO BEFORE ANYONE KNEW WHAT MY STATEMENT WOULD BE. SO I WAS NOT CHERRYPICKED FOR MY RESPONSE.

ALTHOUGH MUCH SCIENTIFIC PROGRESS IS BEING MADE, NEURODEGENERATIVE DISORDERS ARE A TOUGH TARGET. AND OPTIONS FOR ALS WILL REMAIN QUITE LIMITED FOR SOME TIME. IN OTHER WORDS, THERE IS NO MIRACLE PILL ON THE HORIZON. ALTHOUGH THERE IS NO DENYING THAT INTRATHECAL THERAPY IS LESS CONVENIENT THAN PILLS, I BELIEVE THAT IT IS NOT A SUBSTANTIAL OBSTACLE TO USE OF SUCH A THERAPY.

THERE ARE SEVERAL GOOD REASONS FOR THIS. FIRST, INTRATHECAL THERAPY IS ALREADY USED FOR OTHER SERIOUS DISEASES SUCH AS LEUKEMIA, SPINAL MUSCULAR ATROPHY, OR IN MY FIELD FUNGAL MENINGITIS.

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SECOND, IT ANTISENSE THERAPY IS ALREADY BEING USED FOR ALS IN THE SMALL GROUP OF PATIENTS WHO HAVE A MUTATION IN THE SOD1 GENE, AND IT IS THE FIRST ALS TREATMENT THAT HAS BEEN SHOWN TO REVERSE THE DISEASE. UPTAKE OF THIS TREATMENT AMONG THOSE PATIENTS HAS BEEN VERY HIGH.

THIRD, IT THERAPY IS BEING DEVELOPED FOR TREATMENT OF OTHER NEURODEGENERATIVE DISORDERS SUCH AS CREYTZFELDT-JAKOB DISEASE AS DESCRIBED IN *SCIENCE* MAGAZINE JUST THIS MARCH 22D.

FINALLY, I CAN SPEAK FROM MY OWN PERSPECTIVE. I'VE PERFORMED MANY LUMBAR PUNCTURES AND OBSERVED HOW PATIENTS TOLERATED THEM. I AM ALSO FACING PROGRESSIVE DISABILITY AND CERTAIN DEATH FROM MY DISEASE. THERE'S NO QUESTION THAT I WOULD BE WILLING TO ACCEPT INTRATHECAL THERAPY EITHER AS PART OF A TRIAL OR AS AN APPROVED TREATMENT. FOR A DISEASE WITH A DISMAL PROGNOSIS AND FEW TREATMENT OPTIONS, LUMBAR PUNCTURES AND INTRATHECAL THERAPY ARE ACCEPTABLE TO ME AND OTHER PATIENTS. THANK YOU.

MS. MANDAC: THANK YOU SO MUCH, JONATHAN. NEXT TO HAVE THE FLOOR WILL BE SAM ALWORTH. AFTER SAM WILL BE A PHONE NUMBER, (310) 342-5508. SAM, YOU HAVE THE FLOOR.

DR. ALWORTH: HI. THANK YOU. I'M ALSO

SPEAKING IN SUPPORT OF TRAN1-16013 FROM ACURASTEM FOR THE DEVELOPMENT OF AN UNC13A TARGETING ANTISENSE OLIGONUCLEOTIDE OR ASO FOR THE TREATMENT OF ALS. I AM THE CO-FOUNDER AND CEO OF ACURASTEM, AND I THANK THE BOARD FOR THIS OPPORTUNITY TO SPEAK.

OUR PROPOSAL, AS I MENTIONED, IS CURRENTLY RECOMMENDED FOR FUNDING. BUT GIVEN HOW COMPETITIVE THIS IS, I WANTED TO EDUCATE THE BOARD ON THE IMPACT OF OUR PROPOSAL. AS YOU LIKELY KNOW, ALS IS A HORRIBLE AND RAPIDLY PROGRESSING NEURODEGENERATIVE DISEASE THAT CAUSES DEATH IN PATIENTS WITHIN AROUND THREE YEARS ON AVERAGE.

OUR APPLICATION IS IMPORTANT BECAUSE IT TARGETS A BROAD ALS POPULATION. THE THERAPEUTIC MECHANISM OF OUR DRUG CANDIDATE IS RELEVANT FOR NEARLY ALL ALS PATIENTS, WHICH IS VERY DIFFERENT FROM GENETICALLY TARGETED APPROACHES SUCH AS THE RECENTLY APPROVED ASO TREATMENT FOR SOD1 ALS, WHICH IS ABOUT 5 PERCENT OF THE PATIENT POPULATION.

WHILE OUR REVIEW WAS OVERWHELMINGLY POSITIVE, I'D LIKE TO ADDRESS ONE REVIEWER'S CONCERN ABOUT THE DURABILITY OF ASO EXPOSURE AND EFFECTS ON PROTEIN LEVELS AND HOW OFTEN THE ASO TREATMENT WOULD NEED TO BE DOSED. THE LAST FEW YEARS HAVE SEEN QUITE A NUMBER OF CLINICAL TRIALS OF INTRATHECALLY

ADMINISTERED ASO'S AND ONE RECENT APPROVAL.

AS THE FIELD, THE TECHNOLOGY OF ASO'S HAS PROVEN TO GIVE DURABLE SUPPRESSION OF THE TARGET OF INTEREST. AND QUARTERLY DOSING IS NOW THE STANDARD. AND WE EXPECT TO BE ABLE TO ACHIEVE THAT WITH OUR TREATMENT.

LASTLY, DR. BLUM JUST KINDLY SPOKE TO THE ACCEPTABILITY OF INTRATHECAL TREATMENTS FOR ALS PATIENTS. AND AS HE SO ELEGANTLY STATED, IT ADMINISTRATION IS WIDELY ACCEPTED BY ALS PATIENTS WITH TOFERSEN AND ALSO NSMA WITH NUSINERSEN. THANK YOU.

MS. MANDAC: THANK YOU VERY MUCH, DR. ALWORTH. SO NEXT WILL BE (310) 342-5508. PLEASE MAKE SURE WHEN YOU START THAT YOU INTRODUCE YOURSELF AND THE APPLICATION NUMBER YOU'RE SPEAKING FOR. AND AFTER WILL BE ANA MORENO. SO (310) 342-5508, YOU HAVE THE FLOOR.

DR. MCDONALD: YES. GOOD MORNING. CAN YOU HEAR ME?

MS. MANDAC: YES.

DR. MCDONALD: GREAT. GOOD MORNING, EVERYONE. MY NAME IS DOUG MCDONALD, AND I'M A RESEARCH SCIENTIST AND DIRECTOR OF EXTERNAL PARTNERSHIPS AND A MEMBER OF THE PRECLINICAL

LEADERSHIP TEAM AT CHDI FOUNDATION.

CHDI IS A PRIVATELY FUNDED NOT-FOR-PROFIT ORGANIZATION EXCLUSIVELY DEDICATED TO ACCELERATING THERAPIES FOR HUNTINGTON'S DISEASE BY COLLABORATIVELY ENABLING HD R & D.

WE HAVE THREE OFFICES, AND I'M DIALING IN FROM OUR OFFICE IN LOS ANGELES, CALIFORNIA, WHERE I AM BASED.

I'M CALLING TO SUPPORT REVIR THERAPEUTICS' PROJECT APPLICATION ENTITLED "GENETIC THERAPY TARGETING MUTANT HUNTINGTON M-RNA TO TREAT HUNTINGTON'S DISEASE." AND IT'S A PLEASURE TO ADDRESS YOU ALL TODAY.

HUNTINGTON'S IS A HORRIBLE AND FATAL DISEASE WITH A TRUE UNMET MEDICAL NEED. UNLIKE MANY OTHER FATAL DISEASES, SUCH AS IN THE ONCOLOGY SPACE, THERE ARE CURRENTLY NO APPROVED DISEASE MODIFYING THERAPIES FOR HUNTINGTON'S. HUNTINGTON'S IS AN AUTOSOMAL DOMINANT MONOGENIC DISEASE WITH 100 PERCENT PENETRANCE, AND IT MANIFESTS AS A MOVEMENT, PSYCHIATRIC, AND COGNITIVE DISORDER. CHILDREN OF A PARENT WHO HAS HD HAVE A 50-50 CHANCE OF INHERITING THIS FATAL GENE.

REVIR'S INNOVATIVE RNA TARGETING DRUG DISCOVERY PLATFORM HAS ALREADY YIELDED A CANDIDATE

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THERAPY CALLED RX 038 THAT LOWERS THE LEVELS OF MUTANT HUNTINGTON M-RNA AND PROTEIN BY MODIFYING THE SPLICING OF MUTANT HUNTINGTON M-RNA.

THIS SPECIFIC APPROACH TARGETS THE MONOGENIC CAUSE OF THE DISEASE. FURTHERMORE, THEIR PLATFORM IS WELL POSITIONED TO YIELD ADDITIONAL CANDIDATE MOLECULES TO MODULATE OTHER TARGETS OF INTEREST TO HUNTINGTON'S STEMMING FROM THE WELL-VALIDATED HUMAN-BASED GENOMEWIDE ASSOCIATION STUDIES THAT --

MS. MANDAC: THANK YOU SO MUCH. UNFORTUNATELY YOUR TIME IS UP.

DR. MCDONALD: SORRY.

MS. MANDAC: NO, I'M SO SORRY. THANK YOU VERY MUCH, DOUG.

DR. MCDONALD: I'LL JUST PAUSE BY SAYING THAT THE PRECLINICAL LEADERSHIP SCIENTIFIC --

MS. MANDAC: SORRY, DOUG. NEXT WILL BE ANA MORENO ON TRAN1-16022, AN APPLICATION THAT'S RECOMMENDED FOR FUNDING BY THE CIRM TEAM. FOLLOWING ANA WILL BE (818) 519-9963. DR. MORENO, YOU HAVE THE FLOOR.

DR. MORENO: THANK YOU. GOOD MORNING. MY NAME IS ANA MORENO. I AM THE FOUNDER AND CEO OF NAVEGA THERAPEUTICS, A COMPANY BASED IN SAN DIEGO,

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CALIFORNIA. I WANT TO THANK THE REVIEWERS FOR GIVING US THE TOP SCORE OF 85 AND FOR UNDERSTANDING THE HUGE NEED THAT MANY OF US IN CALIFORNIA AND AMERICANS IN GENERAL WITH CHRONIC PAIN ARE FACING.

I CAN IMAGINE MANY PEOPLE IN THE ROOM HAVE EXPERIENCED OR KNOW SOMEONE THAT'S SUFFERING FROM CHRONIC PAIN AND THE AMOUNT OF DEFICIENCY IN THE QUALITY OF LIFE THAT THESE PATIENTS HAVE. INDEED, 17 MILLION AMERICANS SUFFER FROM HIGH IMPACT CHRONIC PAIN, AND OPIATES ARE JUST NOT CUTTING IT WITH ONE IN FOUR PATIENTS PRESCRIBED OPIATES BECOMING ADDICTED TO THEM.

BUT YET ONLY LESS THAN 2 PERCENT, 1.7 PERCENT, OF INVESTMENT IS DEDICATED TO NOVEL CHRONIC PAIN SOLUTIONS ACCORDING TO BYERS INVESTMENT REPORT IN 2023. SO WE REALLY ARE IN DIRE NEED OF NEW TREATMENTS FOR CHRONIC PAIN.

AT NAVEGA WE HAVE DEVELOPED A LONG LASTING, NONADDICTIVE, HIGHLY SPECIFIC EPIGENETIC GENE THERAPY FOR CHRONIC PAIN. WE HAVE SHOWN EFFICACY PRECLINICALLY IN FIVE TYPES OF PAIN, INCLUDING INFLAMMATORY, NEUROPATHIC, VISCERAL, AND ARTHRITIC PAIN, SAFETY IN RODENT AND NONHUMAN PRIMATES WITH NO TOXICITY OBSERVED EVEN AT HIGH DOSES.

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IMPORTANTLY, WE ARE A LUCKY RECIPIENT OF A DISC2 GRANT THAT ALLOWED US TO TEST OUR GENE THERAPIES AND IPSC'S FROM PATIENTS WITH ERYTHROMELALGIA. AS OTHERS HAVE SHOWN THAT PATIENTS THAT RESPOND TO THE IPSC STAGE IN PAIN RESPOND IN THE CLINICAL TRIAL LARGELY TO THE DERISKING OF THERAPY.

AND WE ARE REALLY COMMITTED TO ACTUALLY TREAT PATIENTS. I STARTED THIS JOURNEY IN 2015 AS A PH.D. STUDENT IN THE UNIVERSITY OF CALIFORNIA SAN DIEGO AND STARTED THE COMPANY AFTER SEEING HIGH IMPACT JOURNALS IN TRANSITIONAL MEDICINE. AND THIS JOURNEY IS A DIFFICULT ONE OBVIOUSLY, ESPECIALLY ONE FOCUSED ON CHRONIC PAIN, BUT WE REALLY ARE MOTIVATED BY PATIENTS SUFFERING FROM CHRONIC PAIN THAT HAVE REACHED OUT TO US IN CALIFORNIA, ALSO ABROAD IN AUSTRALIA, ITALY, NETHERLANDS, AND BELGIUM. SO WE REALLY WOULD LIKE TO HAVE YOU -- ASK TO CONSIDER FUNDING US TO HELP END THE OPIATE ADDICTION AND BRING PATIENTS A TREATMENT FOR CHRONIC PAIN. THANK YOU.

MS. MANDAC: THANK YOU SO MUCH, DR. MORENO. NEXT WE WILL HAVE (818) 519-9963 FOLLOWED BY ANOTHER PHONE CALLER, (646) 586-1794. FOR BOTH OF YOU, PLEASE MAKE SURE THAT YOU STATE YOUR NAME,

WHAT APPLICATION YOU'RE SPEAKING TOWARDS. SO (818) 519-9963, YOU HAVE THE FLOOR.

DR. HOLLIS: HELLO. I AM ROGER HOLLIS, AND I'M THE PI FOR THE TRAN1-16030, WHICH IS USING GENE THERAPY TO TREAT A RARE, NONDEGENERATIVE, NEUROGENETIC CONDITION CALLED ANGELMAN SYNDROME.

IN THIS ROUND, ALTHOUGH WE RECEIVED A SCORE THAT SHOULD HAVE BEEN RECOMMENDED FOR FUNDING, WE ARE CURRENTLY NOT RECOMMENDED FOR FUNDING. AND WE REALLY HOPE THAT THE BOARD CAN POSSIBLY CHANGE THEIR MINDS BECAUSE ANGELMAN SYNDROME IS CAUSED BY -- PARDON ME. I'VE GOT A BAD COLD RIGHT NOW. SO ANGELMAN SYNDROME -- WOW. I'M MAKING A COMPLETE MESS OF THIS. I'M SUPER EMBARRASSED.

SO ANGELMAN SYNDROME IS CAUSED BY EXPRESSION OF A SINGLE GENE CALLED UBE3A WITH HUGE UNIQUE IMPRINTING PHENOMENON THAT THIS DISORDER ONLY IMPACTS NEURONS IN THE CENTRAL NEURON SYSTEM AND NO PERIPHERAL SYMPTOMS.

THE PATIENTS LIVING WITH ANGELMAN SYNDROME EXPERIENCE SEVERE DEVELOPMENTAL DELAYS, MULTIDYSFUNCTION, ATAXIA, PROFOUND SLEEP DISTURBANCES, SEIZURES, AND ALMOST UNIVERSAL LACK OF SPEECH, AND UNFORTUNATELY INABILITY TO LIVE AN INDEPENDENT LIFE. IT AFFECTS APPROXIMATELY ONE IN

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15,000 INDIVIDUALS, WHICH IS ABOUT 2600 PEOPLE IN THE STATE OF CALIFORNIA WHICH TRANSLATES TO ABOUT HALF A MILLION PEOPLE WORLDWIDE. AND SADLY THERE ARE NO APPROVED TREATMENTS CURRENTLY FOR ANGELMAN SYNDROME, WHICH LEAD TO A HUGE UNMET CLINICAL NEED FOR THE INDIVIDUALS AND THEIR FAMILIES.

I AM PART THE GENE MEDICINE PROGRAM HERE AT UCLA, AND I'VE BEEN ON THE TEAM THAT HAVE DEVELOPED THERAPIES FOR MULTITUDES OF DISORDERS, INCLUDING BUBBLE BABY DISEASE AND SICKLE CELL ANEMIA. THE PRUDENCE IN GENETICALLY MODIFYING HEMATOPOIETIC STEM CELLS WORK FOR TREATING ANGELMAN SYNDROME BECAUSE HEMATOPOIETIC STEM CELLS GIVE RISE TO AMINE CELLS THAT SET UP RESIDENCE IN THE BRAIN ALSO KNOWN AS RESIDENT AMINE CELLS.

THE GENETICALLY MODIFIED RESIDENT AMINE CELLS ARE STILL CAPABLE OF PERFORMING THEIR NORMAL ROLE IN THE BRAIN, BUT NOW HAVE ALSO BEEN ENDOWED WITH THE ABILITY TO TREAT UBE3A ENZYMES WHICH IS MISSING IN THE ANGELMAN SYNDROME PATIENTS, (UNINTELLIGIBLE) PROTEINS THAT ARE ABLE TO CROSS-CORRECT THE ENZYME DEFICIENCY IN THE SURROUNDING NEURONS AND REVERSES THE DEFECT. AND THE REASON WE ARE SO EXCITED --

MS. MANDAC: THANK YOU SO MUCH, DR.

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HOLLIS. THAT IS TIME. SO THAT WAS FOR APPLICATION TRAN1-16030, ONE OF THE APPLICATIONS NOT RECOMMENDED FOR FUNDING BY THE CIRM TEAM. NEXT IN THE QUEUE IS (646) 586-1794 TO BE FOLLOWED AFTER BY DR. YUAN. SO (646) 586-1794, YOU HAVE THE FLOOR. PLEASE MAKE SURE TO STATE YOUR NAME AND WHAT APPLICATION YOU'RE SPEAKING TOWARDS.

DR. BERENT: HELLO. MY NAME IS ALLYSON BERENT, AND I'M SPEAKING TO TRAN1-16030, "THE EVALUATION OF EX VIVO LENTIVIRAL GENE THERAPY FOR THE TREATMENT OF ANGELMAN SYNDROME."

GOOD MORNING, EVERYONE. I'M THE CHIEF SCIENCE OFFICER FOR THE FOUNDATION FOR ANGELMAN SYNDROME THERAPEUTICS WHERE OUR SINGULAR FOCUS IS TO HELP ADVANCE TRANSFORMATIVE TREATMENTS FOR ALL INDIVIDUALS LIVING WITH ANGELMAN SYNDROME.

ANGELMAN IS A NONDEGENERATIVE DISORDER AFFECTING A SINGLE GENE CALLED THE UBE3A. ITS DEFICIENCY IS ONLY IN NEURONS OF THE BRAIN. AND SINCE 2008 WE AT THE FOUNDATION HAVE WORKED TO FUND EVERY POSSIBLE THERAPEUTIC STRATEGY WITH SCIENTIFIC MERIT THAT CAN BE ADVANCED TOWARDS HUMAN APPLICATION. THIS INCLUDES AN AAV GENE REPLACEMENT THERAPY, ARTIFICIAL TRANSCRIPTION FACTORS, AND AN ANTISENSE OLIGONUCLEOTIDE, AS WELL AS CRISPR GENE

EDITING IN THIS EX VIVO AUTOLOGOUS HEMATOPOIETIC STEM CELL GENE THERAPY.

I'M HERE TODAY BECAUSE OF OUR EXCITEMENT OVER THE PROMISE OF THIS SPECIFIC EX VIVO LENTIVIRAL GENE THERAPY FOR ANGELMAN SYNDROME. COMPARED TO ALL OTHER STRATEGIES THAT WE HAVE FUNDED, THIS HSC APPROACH HAS BEEN THE MOST PROFOUND IMPACT IN THE ANIMAL MODEL, FULLY RESCUING THE PHENOTYPE IN SYMPTOMATIC ANIMALS BOTH AT NEWBORN AND IN ADULT MICE, HAVING THE GREATEST BIODISTRIBUTION TO THE BRAIN, SHOWING THE ABILITY FOR THE UBE3 ENZYME TO CROSS-CORRECT. THESE DATA HAVE CHANGED THE WAY WE THINK ABOUT HOW TO BEST ADDRESS THIS DISORDER FOLLOWING IN THE FOOTSTEPS OF THE RECENTLY APPROVED (UNINTELLIGIBLE) FOR MEDICAL LEUKODYSTROPHY AS WELL AS CYSTINOSIS AND (UNINTELLIGIBLE) ATAXIA THANKS TO THE INCREDIBLE FUNDING BY CIRM.

WE ARE HONORED TO HELP SUPPORT THE WORK OF DR. HOLLIS AND HIS ACCOMPLISHED TEAM AT UCLA TO BE ABLE TO ADVANCE TO A PRE-IND MEETING FOR THIS CURRENT CRITICAL CANDIDATE. IT HAS BEEN AN INCREDIBLE COLLABORATIVE EFFORT ALWAYS WITH SOUND SCIENCE, PATIENT FOCUS AT THE CORE OF ALL OF OUR WORK. AS I AM THE MOTHER TO A LITTLE GIRL WHO LIVES WITH THE ANGELMAN SYNDROME, AND UNFORTUNATELY SHE IS

NONVERBAL AND SHE'S UNABLE TO BE HERE TODAY TO SPEAK FOR HERSELF. SO I AM THE ONE WHO HAS TO SPEAK FOR HER.

WHILE THE SYMPTOMS OF AS PRESENT WITH EXTREME SEVERITY AND SIGNIFICANTLY IMPACT THE DEVELOPMENT AND FUNCTIONING, DATA FROM THE LITERATURE AND THE NATURAL HISTORY STUDY DATING BACK TO 2006 SHOW THAT PATIENTS HAVE A NORMAL LIFESPAN. THERE ARE GLOBAL REGISTRY --

MS. MANDAC: THANK YOU SO MUCH FOR PROVIDING COMMENT ON THE ANGELMAN SYNDROME APPLICATION, TRAN1-16030. SO THE NEXT AND LAST IN OUR LINE IS DR. YUAN ON TRAN2-16061, ONE OF THE APPLICATIONS RECOMMENDED FOR FUNDING BY THE CIRM TEAM. DR. YUAN, YOU HAVE THE FLOOR.

DR. YUAN: THANK YOU SO MUCH. AND I REALLY APPRECIATE THE COMMITTEE FOR THE OPPORTUNITY TO SPEAK. SO I'M A MEDICAL ONCOLOGIST AT CEDARS-SINAI MEDICAL CENTER. SO OUR COLLABORATOR AND MYSELF ARE TRYING TO TACKLE VERY IMPORTANT QUESTION. THE PAST TWO DECADES WE HAVE SEEN TREMENDOUS PROGRESSION OR IMPROVEMENT REGARDING METASTATIC BREAST CANCER TREATMENT. BUT WHEN THEY HAVE GONE BEYOND THE STANDARD OF CARE ARENA, EVERY TIME IN CLINIC WE ARE FACING OUR PATIENTS AND TRYING

TO FIGURE OUT WHAT IS THE BEST NEXT TREATMENT, WE OFTEN HAVE NO GUIDANCE.

SO WE ARE DEVELOPING THIS ASSAY WHICH IS REALLY A NOVEL PRECISION MEDICINE TOOL FOR USING OUR REAL-TIME PATIENT SPECIMEN, ADMITTING TO THE LAB, AND TRY TO CREATE THIS PERSONALIZED TOOL TO GUIDE THE NEXT TREATMENT. SO WE ARE COLLABORATING WITH TERASAKI INSTITUTE AND WORKING ON THIS DIGITAL PATIENT ORGANOID WITH THE AIM TO BRING THAT ANSWER BACK TO THE CLINIC USING UNIQUE PATIENT'S FRESH TUMOR BIOPSY. AND IT'S CALLED DIGITAL PATIENT ORGANOID.

AND WE REALLY APPRECIATE THE OPPORTUNITY FOR THE CONSIDERATION FOR FUNDING. I'LL STOP HERE. THANK YOU.

MS. MANDAC: THANK YOU VERY MUCH, DR. YUAN. ALL RIGHT. THAT IS IT FOR THE PUBLIC COMMENT. BACK TO YOU, VITO.

CHAIRMAN IMBASCIANI: GREAT. THANK YOU. THANK YOU, CLAUDETTE, FOR MANAGING THAT. WE HAVE A TOTAL OF THIRTY-THREE LETTERS. I DON'T KNOW HOW MANY PEOPLE SPOKE. I WANT TO THANK THE WRITERS OF THE LETTERS WHO SENT INFORMATION TO US. SOME OF THE LETTERS WERE FULL OF GREAT SCIENTIFIC RIGOR. OTHERS WERE MORE A CRI DE COEUR. ALL OF THEM WERE WRITTEN

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WITH CARE, AND I WANT TO THANK THE AUTHORS FOR ENLIGHTENING THE MEMBERS OF THIS SUBCOMMITTEE, HELPING US UNDERSTAND BETTER THE HUMAN COST AND THE BURDEN OF DISEASE. WE APPRECIATE THAT IMMENSELY.

I THINK WE ARE NOW AT A POINT WHERE WE CAN RETURN TO THE MOTION THAT IS ON THE FLOOR. WE HAVE HAD BOARD COMMENT, PUBLIC COMMENT. IS THERE ANY OTHER COMMENTS FROM BOARD MEMBERS ON BOARD MEMBER HIGGINS' MOTION? DO YOU REMEMBER IT? IT WAS AWHILE AGO. YOU WANT TO RESTATE IT MAYBE?

MR. HUANG: WE WILL APPROVE --

CHAIRMAN IMBASCIANI: AND ALSO -- I'M SORRY, BEN. EXPLAIN WHAT A YES VOTE AND A NO VOTE MEANS.

MR. HUANG: SURE. APPROVE ALL THE APPLICATIONS IN THE RECOMMENDED RANGE, RECOMMENDED BY CIRM, AND NOT FUND THOSE APPLICATIONS NOT IN THE CIRM RECOMMENDED -- NOT IN THE CIRM RECOMMENDED -- NOT CIRM RECOMMENDED. SORRY.

AND A YES VOTE WOULD JUST MEAN WE -- THIS MOTION WOULD CLOSE -- THIS WOULD BE A GLOBAL MOTION FOR ALL THE APPLICATIONS. A YES VOTE WOULD MEAN THAT ALL THE DARK GREEN APPLICATIONS CURRENTLY WOULD BE APPROVED FOR FUNDING. AND A NO VOTE -- SORRY. ALL THE DARK GREEN APPLICATIONS WILL BE APPROVED FOR

FUNDING. AND THE NON-DARK GREEN APPLICATIONS WOULD NOT BE FUNDED. A NO VOTE WOULD INDICATE THAT WE WOULD PROBABLY NEED TO ENTERTAIN A NEW MOTION IF BOARD MEMBERS ARE INTERESTED IN MOVING ANY APPLICATIONS UP OR DOWN.

BECAUSE THE BUDGET IS FULL, ANY MOTION TO MOVE AN APPLICATION UP WOULD REQUIRE THAT AN APPLICATION WOULD ALSO HAVE TO BE MOVED DOWN FROM THE DARK GREEN RANGE. HOPEFULLY THAT'S CLEAR ENOUGH.

CHAIRMAN IMBASCIANI: IT WAS CLEAR TO ME. THANK YOU, BEN. IT'S VERY IMPORTANT WHAT BEN JUST SAID. AND WE PROBABLY DON'T HAVE TO CLARIFY THAT ANY FURTHER AT THIS POINT. DEPENDS ON THE OUTCOME OF THIS VOTE.

MS. MANDAC: ANNE-MARIE HAS HER HAND UP.

CHAIRMAN IMBASCIANI: ANNE-MARIE.

DR. DULIEGE: YES. I WANT, AGAIN, TO EXPRESS MY GRATITUDE NOT ONLY TO THE PATIENTS, PATIENT'S REPRESENTATIVE, AND SCIENTISTS WHO SENT LETTERS, BUT TO ALL OF YOU WHO HAD THE COURAGE TO COME AND TALK TO US. PARTICULARLY IT'S FRUSTRATING WHEN IT'S ONLY TWO MINUTES AND THE MATTER IS SO IMPORTANT.

I DO REALLY APPRECIATE AS A PERSON AND AS

A SCIENTIST HOW CHALLENGING IT IS TO HEAR, TO GO THROUGH THIS PROCESS FOR PATIENTS AND PATIENT'S REPRESENTATIVES. FOR SCIENTISTS, CEO'S OF BIOTECH COMPANIES, IT'S VERY CHALLENGING AS WELL, BUT WE ARE USED TO THIS PROCESS OF HAVING A TIME TO GO THROUGH A SCREENING AND EVALUATION PROCESS AND BE REJECTED. FOR PATIENTS, ANY REJECTION IS A PERSONAL MATTER AND IS PROBABLY EXTRAORDINARILY HARD TO HEAR THAT.

I'D LIKE TO MAYBE HELP YOU A LITTLE BIT GO THROUGH THAT BY PROVIDING YOU A BETTER UNDERSTANDING OF THE PROCESS WHICH HAS BEEN SO WELL DESCRIBED SO FAR AND WHICH HAVE GONE THROUGH OVER THE PAST 12 YEARS PLUS OF BEING ON THAT BOARD. WE DO RELY ON AN EXCELLENT PROCESS, EXTREMELY SELECTIVE, BUT EXCELLENT PROCESS OF THE GRANT WORKING GROUP.

THE ROLE OF THE BOARD IS TO REVIEW THIS PROCESS AND POTENTIALLY, WHENEVER APPROPRIATE, TO CHALLENGE IT. BUT GENERALLY I DON'T CHALLENGE IT BECAUSE I WANT TO SUPPORT THE PROCESS OF MAKING THE SELECTION OF THESE APPLICATIONS.

WE CAN OFFER TO CHALLENGE IT A LITTLE BIT WHEN WE HAVE SUFFICIENT MONEY POTENTIALLY TO DO SO. IN THAT CASE IT'S A SPECIAL SITUATION WHEREBY FUNDING ONLY THOSE THAT ARE RECOMMENDED, WE WILL HAVE ALREADY MAXED OUT OUR BUDGET. SO WE DON'T HAVE

EVEN THAT LUXURY WHICH WE SHOULD VERY RARELY USE. I HOPE THAT HELPS. AND I STILL WANT TO SAY THAT IT'S EXTRAORDINARILY DIFFICULT PARTICULARLY FOR PATIENTS AND PATIENT'S REPRESENTATIVES. OVER.

CHAIRMAN IMBASCIANI: THANK YOU, ANNE-MARIE. THAT WAS BEAUTIFULLY PUT. APPRECIATE THAT.

ANY FURTHER COMMENT BEFORE WE PROCEED TO A VOTE? DO YOU SEE ANY HANDS? NO.

MS. MORALEZ: THERE ARE NO HANDS RAISED.

MS. MANDAC: NO HANDS.

CHAIRMAN IMBASCIANI: OKAY. ALL RIGHT. THANK YOU. BEN, IT'S ALL YOURS.

MR. HUANG: DAN BERNAL.

MR. BERNAL: AYE.

MR. HUANG: JUDY CHOU.

DR. CHOU: YES.

MR. HUANG: LEONDRA CLARK-HARVEY.

DR. CLARK-HARVEY: AYE.

MR. HUANG: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MR. HUANG: MARK FISCHER-COLBRIE.

MR. FISCHER-COLBRIE: YES.

MR. HUANG: FRED FISHER.

DR. FISHER: YES.

MR. HUANG: ELENA FLOWERS.
DR. FLOWERS: YES.
MR. HUANG: DAVID HIGGINS.
DR. HIGGINS: YES.
MR. HUANG: VITO IMBASCIANI.
CHAIRMAN IMBASCIANI: YES.
MR. HUANG: RICH LAJARA.
MR. LAJARA: YES.
MR. HUANG: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MR. HUANG: ADRIANA PADILLA.
DR. PADILLA: YES.
MR. HUANG: JOE PANETTA.
MR. PANETTA: YES.
MR. HUANG: MARVIN SOUTHARD.
DR. SOUTHARD: YES.
MR. HUANG: KEVIN XU.
DR. XU: YES.
MR. HUANG: THE MOTION PASSES. THANK YOU.
CHAIRMAN IMBASCIANI: THANK YOU. THANK YOU, BOARD MEMBERS AND MEMBERS OF THE PUBLIC, FOR THIS VERY INVIGORATING CONVERSATION.
DO WE -- IS THERE -- AT THIS POINT IS THERE ANY MEMBERS OF THE PUBLIC WHO WANTS TO RAISE ANY GENERAL ISSUE OR ANY ISSUE NOT ON TODAY'S

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AGENDA?

MS. MORALEZ: THERE ARE NO HANDS.

CHAIRMAN IMBASCIANI: HEARING NONE, I'M GOING TO THANK THE BOARD MEMBERS AGAIN FOR THEIR WONDERFUL PARTICIPATION AND PREPARATION FOR THIS MEETING. AND I'M GOING TO ADJOURN THE MEETING. THANK YOU. SEE YOU NEXT MONTH.

MS. MANDAC: THANK YOU VERY MUCH.

(THE MEETING WAS THEN CONCLUDED AT 10:28 A.M.)

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REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT OF THE VIRTUAL PROCEEDINGS BEFORE THE APPLICATION REVIEW SUBCOMMITTEE OF THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON MARCH 30, 2024, WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CA CSR 7152
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