

Calendar No. 773108TH CONGRESS
2D SESSION**S. 518****[Report No. 108–387]**

To increase the supply of pancreatic islet cells for research, to provide better coordination of Federal efforts and information on islet cell transplantation, and to collect the data necessary to move islet cell transplantation from an experimental procedure to a standard therapy.

IN THE SENATE OF THE UNITED STATES

MARCH 5, 2003

Ms. COLLINS (for herself, Mrs. MURRAY, Mr. BREAUX, Mr. MILLER, Mr. BUNNING, Mr. LOTT, Mr. DAYTON, Mr. ALLEN, Mr. INHOFE, Mrs. LINCOLN, Mr. DASCHLE, Mr. CHAMBLISS, Mr. SMITH, Mr. DORGAN, Mr. BINGAMAN, Mr. REED, Mr. MCCAIN, Mr. BIDEN, Mr. HARKIN, Mr. CHAFEE, Mr. CRAIG, Mr. HAGEL, Mr. FITZGERALD, Mr. COCHRAN, Mr. DOMENICI, Mr. BOND, Mr. DURBIN, Mr. SESSIONS, Mr. ENSIGN, Mr. ALEXANDER, Mr. WARNER, Mr. KERRY, Mr. GRAHAM of South Carolina, Mr. CORZINE, Mr. DODD, Mrs. CLINTON, Mr. SCHUMER, Mr. NELSON of Nebraska, Ms. MIKULSKI, Mr. LIEBERMAN, Mr. COLEMAN, Mr. FEINGOLD, Mrs. BOXER, Mr. BURNS, Mr. LAUTENBERG, Ms. LANDRIEU, Mr. TALENT, Ms. STABENOW, Mr. DEWINE, Ms. MURKOWSKI, Mr. GRAHAM of Florida, Mr. NELSON of Florida, and Mr. SARBANES) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

OCTOBER 7, 2004

Reported by Mr. GREGG, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italie*]

A BILL

To increase the supply of pancreatic islet cells for research,

to provide better coordination of Federal efforts and information on islet cell transplantation, and to collect the data necessary to move islet cell transplantation from an experimental procedure to a standard therapy.

1 *Be it enacted by the Senate and House of Representa-*
 2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Pancreatic Islet Cell
 5 Transplantation Act of 2003”.

6 **SEC. 2. FINDINGS.**

7 Congress makes the following findings:

8 (1) Approximately 1,000,000 individuals in the
 9 United States have juvenile, or Type I, diabetes.

10 (2) In individuals with juvenile diabetes, the
 11 body’s immune system attacks the pancreas and de-
 12 stroys islet cells that produce insulin.

13 (3) Insulin is not a cure and individuals with
 14 juvenile diabetes face the constant threat of dev-
 15 astating complications as well as a drastic reduction
 16 in their quality of life and shortening of their life
 17 span.

18 (4) The development of the “Edmonton Pro-
 19 tocol” and subsequent variations of that protocol, in-
 20 volving the transplant of insulin-producing pan-
 21 creatic islet cells into individuals with juvenile diabe-
 22 tes, have brought us within reach of a cure.

1 (5) Islet cell transplants have been hailed as the
2 most promising development in diabetes since the
3 discovery of insulin.

4 (6) Of the approximately 200 individuals treat-
5 ed using variations of the Edmonton Protocol, nearly
6 80 percent remain insulin independent after 1 year.

7 (7) One of the key hurdles in expanding the
8 number of patients enrolled in these protocols is the
9 insufficient number of pancreases available for islet
10 cell transplantation.

11 (8) Diabetes is the most common cause of kid-
12 ney failure, accounting for 40 percent of new cases.

13 (9) While a significant percentage of individuals
14 with Type I diabetes will experience kidney failure
15 and become eligible for benefits under the medicare
16 program, insufficient data exists to conduct an as-
17 sessment to determine the efficacy of simultaneous
18 islet-kidney transplants or islet transplants after kid-
19 ney transplants for individuals with Type I diabetes
20 and kidney failure.

21 (10) The Federal Government should promote
22 policies and regulations to increase the supply of
23 pancreata for research, to coordinate efforts and in-
24 formation in the emerging area of islet cell trans-
25 plantation, to collect the data necessary to move islet

1 cell transplantation from an experimental procedure
 2 to a standard therapy covered by insurance, and to
 3 assess the efficacy of islet transplantation for indi-
 4 viduals with Type I diabetes and kidney failure.

5 **SEC. 3. ORGAN PROCUREMENT ORGANIZATION CERTIFI-**
 6 **CATION.**

7 Section 371 of the Public Health Service Act (42
 8 U.S.C. 273) is amended by adding at the end the fol-
 9 lowing:

10 “(c) Pancreases procured by an organ procurement
 11 organization and used for islet cell transplantation or re-
 12 search shall be counted for purposes of certification or re-
 13 certification under subsection (b).”.

14 **SEC. 4. INTERAGENCY COMMITTEE ON ISLET CELL TRANS-**
 15 **PLANTATION.**

16 (a) ESTABLISHMENT.—There is established within
 17 the Department of Health and Human Services the Inter-
 18 agency Committee on Islet Cell Transplantation
 19 (in this section referred to as the “Committee”).

20 (b) MEMBERSHIP.—The Committee shall be com-
 21 posed of a representative from—

22 (1) the National Institute on Diabetes and Di-
 23 gestive Kidney Diseases, who shall serve as chair-
 24 person of the Committee;

1 (2) the National Institute of Allergy and Infec-
2 tious Diseases;

3 (3) the National Institute of Environmental
4 Health Sciences;

5 (4) the Health Resources and Services Adminis-
6 tration;

7 (5) the Centers for Medicare and Medicaid
8 Services;

9 (6) the Department of Defense;

10 (7) the Department of Veterans Affairs;

11 (8) the National Aeronautics and Space Admin-
12 istration; and

13 (9) other agencies and National Institutes of
14 Health representatives as determined appropriate by
15 the chairperson and Secretary of Health and Human
16 Services.

17 (e) DUTIES.—

18 (1) STUDY.—The Committee shall conduct a
19 study of—

20 (A) the adequacy of Federal research fund-
21 ing for taking advantage of scientific opportuni-
22 ties relating to islet cell transplantation;

23 (B) current policies and regulations affect-
24 ing the supply of pancreases for islet cell trans-
25 plantation;

1 (C) the effect of xenotransplantation on
2 advancing islet cell transplantation;

3 (D) the effect of United Network for
4 Organ Sharing variances on pancreas retrieval
5 and islet cell transplantation; and

6 (E) the existing mechanisms to collect and
7 coordinate outcome data from existing islet cell
8 transplantation trials.

9 (2) RECOMMENDATIONS.—The Committee shall
10 develop recommendations concerning the matters
11 studied under paragraph (1).

12 (3) REPORT.—Not later than 1 year after the
13 date of enactment of this Act and annually there-
14 after, the Committee shall submit a report to the
15 Secretary of Health and Human Services and the
16 appropriate committees of Congress that shall con-
17 tain a detailed statement of the findings and conclu-
18 sions of the Committee, together with recommenda-
19 tions for such legislation and administrative actions
20 as the committee considers appropriate to increase
21 the supply of pancreases available for islet cell trans-
22 plantation.

23 **SEC. 5. STUDY.**

24 (a) IN GENERAL.—The Secretary of Health and
25 Human Services shall request that the Institute of Medi-

1 cine conduct, or contract with another entity to conduct,
 2 a study on the impact of islet cell transplantation on the
 3 health-related quality of life and the economic outcomes
 4 for individuals with juvenile diabetes and the cost-effec-
 5 tiveness of such treatment.

6 (b) MATTERS STUDIED.—The study authorized
 7 under this section shall examine and consider the health-
 8 related quality of life of juvenile diabetes patients before
 9 and after pancreatic cell transplantation. Outcome meas-
 10 ures shall include—

11 (1) clinical outcomes, including episodes of
 12 hypoglycemia unawareness and the long-term devel-
 13 opment of diabetes-related clinical complications, in-
 14 cluding nephropathy, neuropathy, retinopathy, and
 15 vascular disease;

16 (2) health-related quality of life outcomes, in-
 17 cluding patient levels of worry with respect to fear
 18 of hypoglycemia episodes, the ability to perform
 19 basic life and work-associated functions, and the im-
 20 pact on the quality of life of family members and
 21 caregivers; and

22 (3) the cost-effectiveness of pancreatic islet cell
 23 transplantation, as compared to both standard med-
 24 ical management (such as continued daily insulin in-

1 jections) and whole pancreas transplantation, for pa-
 2 tients with juvenile diabetes.

3 ~~(c) COST-EFFECTIVENESS ANALYSIS.—Cost-effec-~~
 4 ~~tiveness analysis, as described in subsection (b)(3), shall~~
 5 ~~include standard health profile instruments to assess post-~~
 6 ~~treatment costs and benefits, including—~~

7 ~~(1) direct measures, such as—~~

8 ~~(A) post-transplant health care resource~~
 9 ~~utilization; and~~

10 ~~(B) long-term health care resource utiliza-~~
 11 ~~tion due to diabetes complications, including~~
 12 ~~nephropathy, neuropathy, retinopathy, and vas-~~
 13 ~~cular disease which can extend to include sight~~
 14 ~~loss and limb loss; and~~

15 ~~(2) indirect measures, such as—~~

16 ~~(A) time lost at work; and~~

17 ~~(B) productivity analysis.~~

18 **SEC. 6. MEDICARE DEMONSTRATION PROJECT.**

19 ~~(a) ESTABLISHMENT OF PROJECT.—~~

20 ~~(1) IN GENERAL.—The Secretary of Health and~~
 21 ~~Human Services, acting through the Administrator~~
 22 ~~of the Centers for Medicare & Medicaid Services and~~
 23 ~~in consultation with the Director of the National In-~~
 24 ~~stitutes of Health and the Administrator of the~~
 25 ~~Agency for Healthcare Research and Quality (in this~~

1 section referred to as the “Secretary”) shall estab-
 2 lish a demonstration project (in this section referred
 3 to as the “project”) to assess the efficacy of pan-
 4 creatic islet cell transplantation for individuals with
 5 Type I diabetes, who are medically determined to
 6 have end-stage renal disease, and who are bene-
 7 ficiaries under the medicare program under title
 8 XVIII of the Social Security Act (42 U.S.C. 1395 et
 9 seq.).

10 (2) ASSESSMENT OF ISLET TRANSPLANTS.—

11 The project shall assess the efficacy of simultaneous
 12 islet-kidney transplants as well as islet transplants
 13 after a kidney transplant for individuals with Type
 14 I diabetes and kidney failure.

15 (b) DURATION.—The Secretary shall conduct the
 16 demonstration project under this section for a 5-year pe-
 17 riod.

18 (c) SELECTION OF PARTICIPATING FACILITIES.—

19 (1) COMPETITIVE SELECTION.—Subject to
 20 paragraph (2), the Secretary shall select eligible fa-
 21 cilities to participate in the project on a competitive
 22 basis.

23 (2) LIMITATION.—No more than 6 eligible fa-
 24 cilities may participate in the project.

1 ~~(3) ELIGIBLE FACILITY DEFINED.~~—In this sec-
 2 tion, the term eligible facility means a facility that—

3 ~~(A) is eligible to receive payments under~~
 4 section 1881 of the Social Security Act (42
 5 U.S.C. 1395rr);

6 ~~(B) has experience performing islet cell~~
 7 transplants; and

8 ~~(C) agrees to provide such data to the Sec-~~
 9 retary as the Secretary determines is necessary
 10 to conduct the evaluation under subsection
 11 ~~(d)(1).~~

12 ~~(d) EVALUATION AND REPORT.—~~

13 ~~(1) EVALUATION.~~—The Secretary shall conduct
 14 an evaluation of the outcomes under the project to
 15 assess the efficacy of pancreatic islet cell transplan-
 16 tation for individuals with Type I diabetes who are
 17 medically determined to have end-stage renal dis-
 18 ease.

19 ~~(2) REPORT.~~—Not later than 120 days after
 20 the date on which the project is completed, the Sec-
 21 retary shall submit to Congress a report on the eval-
 22 uation conducted under paragraph (1) together with
 23 such recommendations for legislative and adminis-
 24 trative actions that the Secretary determines are ap-
 25 propriate.

1 (e) ~~WAIVER AUTHORITY.~~—The Secretary may waive
 2 such requirements of titles XI and XVIII of the Social
 3 Security Act (42 U.S.C. 1301 et seq. and 1395 et seq.)
 4 as may be necessary for the purposes of carrying out the
 5 project.

6 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

7 There are authorized to be appropriated such sums
 8 as may be necessary to carry out this Act.

9 **SECTION 1. SHORT TITLE.**

10 *This Act may be cited as the “Pancreatic Islet Cell*
 11 *Transplantation Act of 2004”.*

12 **SEC. 2. ORGAN PROCUREMENT ORGANIZATION CERTIFI-**
 13 **CATION.**

14 *Section 371 of the Public Health Service Act (42*
 15 *U.S.C. 273) is amended by adding at the end the following:*

16 *“(c) Pancreases procured by an organ procurement or-*
 17 *ganization and used for islet cell transplantation or re-*
 18 *search shall be counted for purposes of certification or recer-*
 19 *tification under subsection (b).”.*

20 **SEC. 3. ANNUAL ASSESSMENT ON PANCREATIC ISLET CELL**
 21 **TRANSPLANTATION.**

22 *Section 429 of the Public Health Service Act (42*
 23 *U.S.C. 285c–3) is amended by adding at the end the fol-*
 24 *lowing:*

1 “(d) *In each annual report prepared by the Diabetes*
2 *Mellitus Interagency Coordinating Committee pursuant to*
3 *subsection (c), the Committee shall include an assessment*
4 *of the Federal activities and programs related to pancreatic*
5 *islet cell transplantation. Such assessment shall, at a min-*
6 *imum, address the following:*

7 “(1) *The adequacy of Federal funding for taking*
8 *advantage of scientific opportunities relating to pan-*
9 *creatic islet cell transplantation.*

10 “(2) *Current policies and regulations affecting*
11 *the supply of pancreata for islet cell transplantation.*

12 “(3) *The effect of xenotransplantation on ad-*
13 *vancing pancreatic islet cell transplantation.*

14 “(4) *The effect of United Network for Organ*
15 *Sharing policies regarding pancreas retrieval and*
16 *islet cell transplantation.*

17 “(5) *The existing mechanisms to collect and co-*
18 *ordinate outcomes data from existing islet cell trans-*
19 *plantation trials.*

20 “(6) *Implementation of multiagency clinical in-*
21 *vestigations of pancreatic islet cell transplantation.*

22 “(7) *Recommendations for such legislation and*
23 *administrative actions as the Committee considers*
24 *appropriate to increase the supply of pancreases*
25 *available for islet cell transplantation.”.*

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