Liver and Intestine Transplantation in the U.S., 1996-2005: Summary View From the 2006 *OPTN/SRTR Annual Report*

OVERVIEW

- The number of liver transplants performed yearly has slowly and steadily increased over the last 10 years, reaching 6,441 procedures in 2005.
- The number of living donor liver transplants performed rose steadily from 1996 to 2001, when it peaked at 519; since 2003 there have been approximately 320 such procedures performed each year.
- The continual increase in the size of the waiting list for a liver transplant, which peaked in 2001 at 14,897 patients, was interrupted in 2002 by the implementation of the allocation system based on the Model for End-stage Liver Disease and Pediatric End-stage Liver Disease (MELD/PELD).
- Activity in all areas of intestinal transplantation continues to increase. One-year patient and graft survival following intestine-alone transplantation now seem to be superior to outcomes following liver-intestine transplantation.
- Other topics covered here include the recent “Share 15” component of the MELD allocation system; liver transplantation following donation after cardiac death; simultaneous liver-kidney transplantation, and waiting list and posttransplant outcomes for both liver and intestine transplantation, broken out by a variety of clinical and demographic factors.

SUMMARY FIGURES

The figures on the following two pages are “dashboard” views of the state of liver and intestine transplantation. Details on the implications of these figures, and explanations of the methods used in creating them, are included in Chapter V of this year’s report, available online at www.optn.org and www.ustransplant.org. These sites also include resources for interested readers, including a glossary, technical notes, other chapters on many aspects of organ transplantation, and a wealth of transplant data.

THE 2006 *OPTN/SRTR ANNUAL REPORT*

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The data and analyses reported in the 2006 Annual Report of the U.S. Organ Procurement and Transplantation Network and the Scientific Registry of Transplant Recipients have been supplied by UNOS and Arbor Research under contract with the Department of Health and Human Services. The authors alone are responsible for reporting and interpreting these data; the views expressed herein are those of the authors and not necessarily those of the U.S. Government.

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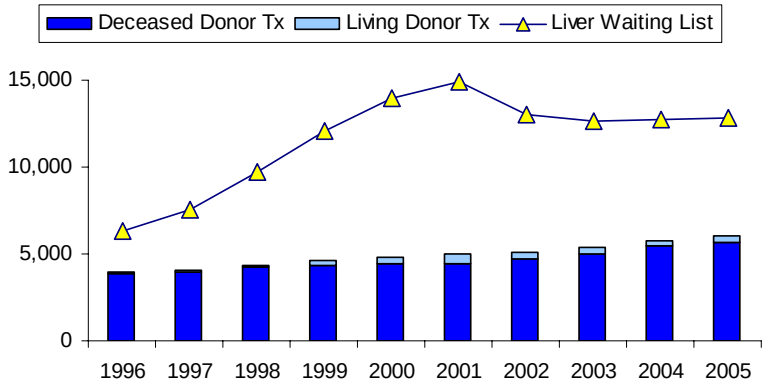
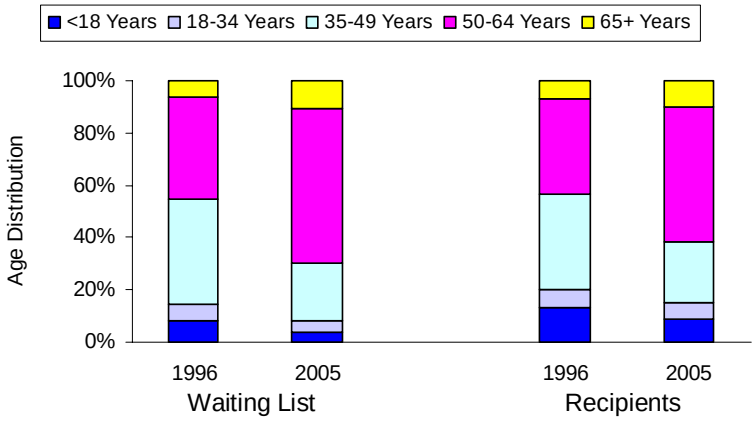
Publications based upon data in this report or supplied upon request must include the above citation.

Liver Transplantation at a Glance



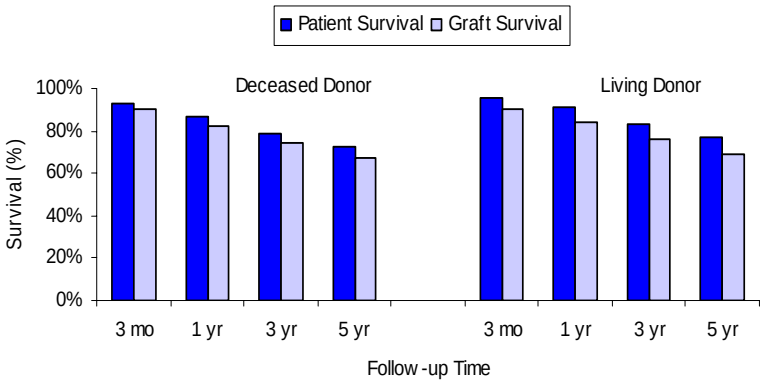
Number of Transplants and Size of Active Waiting List.

The large increase in the number of patients awaiting a liver transplant has stabilized since 2002, when the MELD/PELD system began. The number receiving a deceased donor liver transplant has gradually increased, more steeply in 2004 and 2005. The gap between the numbers of candidates and recipients has been slowly shrinking since 2002. Source: *2006 OPTN/SRTR Annual Report*, Tables 1.7, 9.1a, 9.1b.



Age Distribution of Recipients and Active Waiting List.

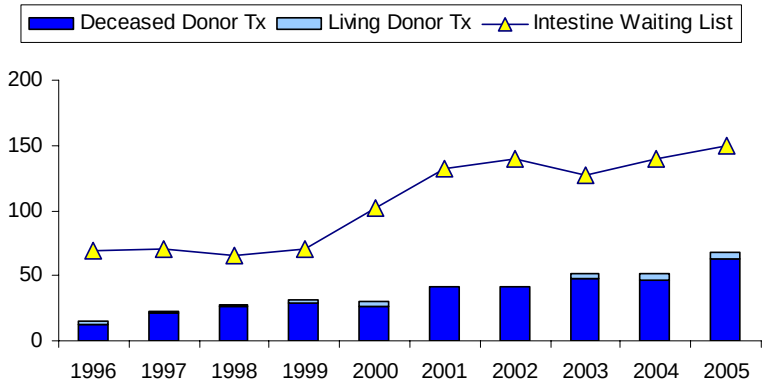
The numbers of candidates and recipients age 35-49 have remained fairly constant over the decade, but the age group's proportion by both measures has declined. Recipients include transplants from both living and deceased donors. Source: *2006 OPTN/SRTR Annual Report*, Tables 9.1a, 9.4a, 9.4b.



Unadjusted Patient and Graft Survival.

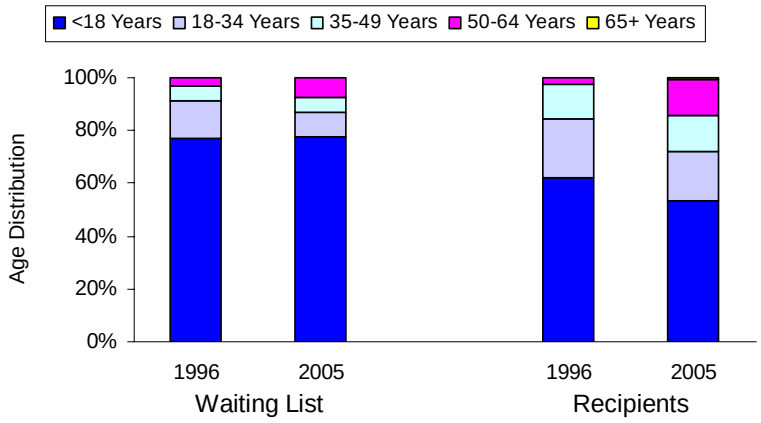
Patient survival in recent years has been improving for both deceased donors and living donors, with 73% and 77% of patients, respectively, alive five years following transplantation. Graft survival is lower since patients may live after graft failure through repeat liver transplantation. Source: *2006 OPTN/SRTR Annual Report*, Tables 9.10a, 9.10b, 9.14a, and 9.14b.

Intestine Transplantation at a Glance



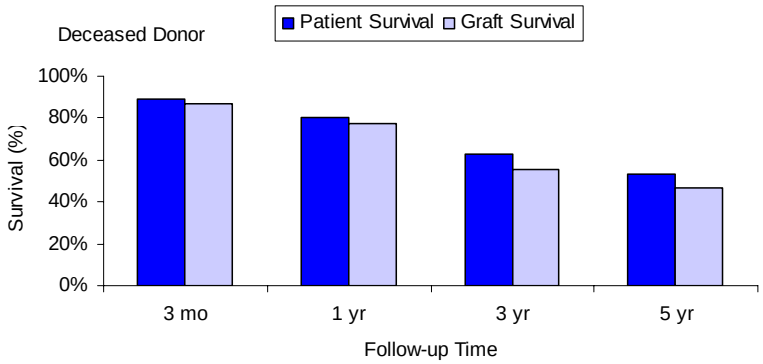
Number of Transplants and Size of Active Waiting List.

The numbers of patients on the intestine waiting list and the number receiving a transplant both approximately doubled between 1996 and 2005. The difference between the number of candidates and transplant recipients has been increasing through the second half of the decade. Source: *2006 OPTN/SRTR Annual Report*, Tables 1.7, 10.1a.



Age Distribution of Recipients and Active Waiting List.

About 75% of intestine candidates have been in the pediatric age group. The small group of candidates in the age group >50 years doubled during the decade. Adult recipients make up a greater portion of recipients than candidates. The age group older than 50 shows a large increase during the decade in both categories. Source: *2006 OPTN/SRTR Annual Report*, Tables 10.1a, 10.4.



Unadjusted Patient and Graft Survival.

One-year patient survival reached 80% in 2005; however, longer-term survival at 5 years is 53%. Graft survival is lower, as patients may survive graft failure through parenteral alimentation or retransplantation. Source: *2006 OPTN/SRTR Annual Report*, Tables 10.10, 10.14.