Section I: Immunosuppression

## Introduction

Kidney transplantation is the treatment of choice for CKD stage 5. The risk of death for KTRs is less than half of that for dialysis patients (1). Any differences in patient survival attributable to different immunosuppressive medication regimens are substantially smaller than the survival difference between dialysis and transplantation. Specifically, marginally inferior immunosuppressive medication regimens will result in substantially better patient outcomes than dialysis. Thus, it is better to perform kidney transplantation even with an inferior immunosuppressive regimen, than to avoid transplantation altogether.

Recommendations for immunosuppressive medications are necessarily complex, because combinations of multiple classes of drugs are used and because the choices among different regimens are determined by the tradeoffs between benefits and harm. Typically, a greater degree of immunosuppression may reduce the risk of rejection, but may also increase the risk of infection and cancer. Decision analysis with patient-based utilities may be needed to correctly assess the tradeoffs between benefits and harm, but this has not usually been done.

## **Rating Guideline Recommendations**

Within each recommendation, the strength of recommendation is indicated as **Level 1**, **Level 2**, or **Not Graded**, and the quality of the supporting evidence is shown as **A**, **B**, **C**, or **D**.

Grade*	Wording	Grade for quality of evidence	Quality of evidence
Level 1	'We recommend'	A	High
		В	Moderate
Level 2	'We suggest'	С	Low
		D	Very low

\*The additional category 'Not Graded' was used, typically, to provide guidance based on common sense or where the topic does not allow adequate application of evidence. The most common examples include recommendations regarding monitoring intervals, counseling, and referral to other clinical specialists. The ungraded recommendations are generally written as simple declarative statements, but are not meant to be interpreted as being stronger recommendations than Level 1 or 2 recommendations.