

Table S1. Summary of TDT-type methods and their respective features

Method/ Reference	Incorporation of:							
	Missing parents	Multiple alleles	Parental phenotypes	Quantitative traits	Extended pedigrees	Different family structures	Multiple markers	Covariates
Curtis (1997) ^{S1}	*	*						
S-TDT (Spielman and Ewens, 1998) ^{S2}	*	*				*		
DAT (Boehnke and Langefeld, 1998) ^{S3}	*	*						
SDT (Horvath and Laird, 1998) ^{S4}	*	*				*		
NFS (Whittemore and Tu, 2000) ^{S5}	*	*				*	*	*
TRANSMIT (Clayton, 1999) ^{S6}	*	*				*	*	
RC-TDT (Knapp, 1999) ^{S7}	*							
I-TDT (Sun et al., 1999) ^{S8}	*	*						
Martin et al. (1997) ^{S9}	*	*				*		
George et al. (1999) ^{S10}	*			*	*	*		*
P-TDT (Abecasis et al., 2000) ^{S11}	*			*	*	*		*
Bickeboller and Clerget-Darpoux (1995) ^{S12}		*						
Spielman and Ewens (1996) ^{S13}		*						
Purcell et al. (2005) ^{S14}			*	*				*
TDT(max) (Morris, 1997) ^{S15}		*						
Lazzeroni and Lange (1998) ^{S16}		*					*	
Monks and Kaplan (2000) ^{S17}		*		*		*	*	
Xiong et al. (1998) ^{S18}		*		*				

Continued

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Method/ Reference	Incorporation of:							
	Missing parents	Multiple alleles	Parental phenotypes	Quantitative traits	Extended pedigrees	Different family structures	Multiple markers	Covariates
Fan and Jung (2002) ^{S19}		*		*		*		*
TDT(Q1) – TDT(Q5) (Allison, 1997) ^{S20}				*				*
Rabinowitz (1997) ^{S21}		*		*				*
Allison <i>et al.</i> (1999) ^{S22}	*	*		*				
Sun <i>et al.</i> (2000) ^{S23}	*			*		*		*
Schaid and Rowlands (2000) ^{S24}				*		*		*
Waldman <i>et al.</i> (1999) ^{S25}				*				*
Sinsheimer <i>et al.</i> (2000) ^{S26}		*		*	*		*	*
Kistner and Weinberg (2004) ^{S27}	*	*		*				
QTD (Abecasis <i>et al.</i> , 2000) ^{S28}	*			*		*		*
Zhu and Elston (2001) ^{S29}				*	*	*		*
PDT (Martin, 2000) ^{S30}					*	*		
Goring and Terwilliger (2000) ^{S31}					*	*		
Clayton and Jones (1999) ^{S32}				*			*	
ETDT (Sham and Curtis, 1995) ^{S33}		*						
TDT-EX (Cleves <i>et al.</i> , 1997) ^{S34}	*	*						
Fulker (1999) ^{S35}	*			*				*
Fan <i>et al.</i> (2002) ^{S36}		*		*				*

Table S1 References

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