				-			
ID	M 0	M1	M2	M3	M4	M5	M6
1	Ø	11172	290	Ø	Ø	Ø	n.t.
2	Ø	Ø	6696	Ø	Ø	Ø	n.t.
3	Ø	Ø	Ø	1286	2007	Ø	Ø
4	Ø	Ø	1006	173	Ø	Ø	Ø
5	Ø	381	Ø	Ø	Ø	Ø	Ø
6	Ø	Ø	Ø	154	321	50	Ø
7	Ø	Ø	259	101	Ø	Ø	Ø
8	Ø	Ø	258	Ø	n.t.	n.t.	Ø

Supplementary Table 1. CMV-DNAemia in CMV IgG donor +/recipient - liver transplant recipients with viral replication.

This table extends the data on CMV-DNAemia as presented in Table 3 and displays monthly data on DNA load testing. Eight out of 14 CMV IgG donor +/recipient - liver transplant recipients (ID 1-8) showed viral replication after the end of prophylaxis. Viral load is given as copies/ml. M - month after the end of antiviral prophylaxis; \emptyset - below the detection limit of 40 copies/ml (62.4 IU/ml); n.t. - not tested. Maximum values are highlightened red.

All	Month 0			Month 1							
	Women o			95% CI					95% CI		
Cut-off 40 copies/ml	AUC	SE	p	LL	UL	AUC	SE	p	LL	UL	
IE-1 Lo (Algo)	.517	.084	.836	.353	.682	.575	.090	.427	.399	.751	
pp65 Lo (Algo)	.545	.084	.589	.380	.710	.508	.091	.930	.330	.686	
IE-1 Lo (Median)	.532	.084	.702	.368	.696	.574	.089	.435	.399	.749	
pp65 Lo (Median)	.548	.084	.569	.383	.712	.504	.091	.970	.326	.682	
IE-1 OI	.525	.084	.768	.361	.688	.549	.091	.605	.371	.726	
pp65 OI	.612	.083	.178	.450	.775	.512	.091	.900	.334	.690	
QuantiFERON	.482	.084	.829	.317	.647	.352	.093	.118	.170	.534	
		O E		95% CI			0.1		95% CI		
Cut-off 500 copies/ml	AUC	SE	р	LL	UL	AUC	SE	p	LL	UL	
IE-1 Lo (Algo)	.668	.080	.117	.511	.825	.762	.082	.059	.601	.922	
pp65 Lo (Algo)	.669	.101	.115	.471	.868	.603	.165	.460	.279	.926	
IE-1 Lo (Median)	.698	.081	.065	.539	.856	.772	.082	.050	.610	.933	
pp65 Lo (Median)	.675	.103	.103	.473	.877	.610	.163	.427	.291	.930	
IE-1 OI	.636	.087	.207	.465	.806	.659	.133	.252	.399	.919	
pp65 OI	.744	.074	.023	.599	.888	.687	.136	.177	.420	.955	
QuantiFERON	.568	.099	.528	.373	.762	.605	.121	.448	.367	.843	
D+/R-	Mor	nth 0				Mon	th 1				
D+/R-				95%	6 CI				95%	6 CI	
D+/R- Cut-off 40 copies/ml	Mor AUC	nth 0 SE	р	95% LL	% CI UL	Mon AUC	oth 1 SE	р	95% LL	% CI UL	
			<i>p</i> 1.000					<i>p</i> .100			
Cut-off 40 copies/ml	AUC	SE		LL	UL	AUC	SE		LL	UL	
Cut-off 40 copies/ml IE-1 Lo (Algo)	AUC .500	SE .161	1.000	LL .185	UL .815	AUC .200	SE .151	.100	LL .000	UL .495	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo)	AUC .500 .375	SE .161 .152	1.000 .439	LL .185 .077	UL .815 .673	AUC .200 .233	SE .151 .160	.100 .144	LL .000 .000	UL .495 .547	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median)	AUC .500 .375 .448	SE .161 .152 .158	1.000 .439 .747	LL .185 .077 .138	UL .815 .673 .758	AUC .200 .233 .250	SE .151 .160 .161	.100 .144 .171	LL .000 .000 .000	UL .495 .547 .565	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median)	AUC .500 .375 .448 .406	SE .161 .152 .158 .156	1.000 .439 .747 .561	LL .185 .077 .138 .101	UL .815 .673 .758 .712	AUC .200 .233 .250 .233	SE .151 .160 .161 .160	.100 .144 .171 .144	LL .000 .000 .000 .000	UL .495 .547 .565 .547	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI	AUC .500 .375 .448 .406 .250	SE .161 .152 .158 .156 .133	1.000 .439 .747 .561 .121	LL .185 .077 .138 .101 .000	UL .815 .673 .758 .712 .511	AUC .200 .233 .250 .233 .100	SE .151 .160 .161 .160 .114	.100 .144 .171 .144 .028	LL .000 .000 .000 .000 .000	UL .495 .547 .565 .547 .323	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI	AUC .500 .375 .448 .406 .250 .469 .438	SE .161 .152 .158 .156 .133 .162 .158	1.000 .439 .747 .561 .121 .846 .699	LL .185 .077 .138 .101 .000 .151 .128	UL .815 .673 .758 .712 .511 .786	AUC .200 .233 .250 .233 .100 .233 .200	SE .151 .160 .161 .160 .114 .160 .151	.100 .144 .171 .144 .028 .144 .100	LL .000 .000 .000 .000 .000 .000	UL .495 .547 .565 .547 .323 .547	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI	AUC .500 .375 .448 .406 .250 .469	SE .161 .152 .158 .156 .133 .162	1.000 .439 .747 .561 .121 .846	LL .185 .077 .138 .101 .000 .151 .128	UL .815 .673 .758 .712 .511 .786 .747	AUC .200 .233 .250 .233 .100 .233	SE .151 .160 .161 .160 .114 .160	.100 .144 .171 .144 .028 .144	LL .000 .000 .000 .000 .000 .000	UL .495 .547 .565 .547 .323 .547 .495	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI QuantiFERON	AUC .500 .375 .448 .406 .250 .469 .438	SE .161 .152 .158 .156 .133 .162 .158	1.000 .439 .747 .561 .121 .846 .699	LL .185 .077 .138 .101 .000 .151 .128 95%	UL .815 .673 .758 .712 .511 .786 .747 6 CI	AUC .200 .233 .250 .233 .100 .233 .200	SE .151 .160 .161 .160 .114 .160 .151	.100 .144 .171 .144 .028 .144 .100	LL .000 .000 .000 .000 .000 .000 .000 95%	UL .495 .547 .565 .547 .323 .547 .495	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI QuantiFERON Cut-off 500 copies/ml	AUC .500 .375 .448 .406 .250 .469 .438 AUC	SE .161 .152 .158 .156 .133 .162 .158 SE	1.000 .439 .747 .561 .121 .846 .699 <i>p</i>	LL .185 .077 .138 .101 .000 .151 .128 95% LL	UL .815 .673 .758 .712 .511 .786 .747 6 CI UL	AUC .200 .233 .250 .233 .100 .233 .200 AUC	SE .151 .160 .161 .160 .114 .160 .151 SE	.100 .144 .171 .144 .028 .144 .100 <i>p</i>	LL .000 .000 .000 .000 .000 .000 .000 95% LL	UL .495 .547 .565 .547 .323 .547 .495 6 CI UL	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI QuantiFERON Cut-off 500 copies/ml IE-1 Lo (Algo)	AUC .500 .375 .448 .406 .250 .469 .438 AUC .513	SE .161 .152 .158 .156 .133 .162 .158 SE .179	1.000 .439 .747 .561 .121 .846 .699 <i>p</i> .944	LL .185 .077 .138 .101 .000 .151 .128 95% LL .162	UL .815 .673 .758 .712 .511 .786 .747 6 CI UL .863	AUC .200 .233 .250 .233 .100 .233 .200 AUC .667	SE .151 .160 .161 .160 .114 .160 .151 SE .187	.100 .144 .171 .144 .028 .144 .100 <i>p</i> .480	LL .000 .000 .000 .000 .000 .000 95% LL .300	UL .495 .547 .565 .547 .323 .547 .495 6 CI UL 1.000	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI QuantiFERON Cut-off 500 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo)	AUC .500 .375 .448 .406 .250 .469 .438 AUC .513 .700	SE .161 .152 .158 .156 .133 .162 .158 SE .179 .142	1.000 .439 .747 .561 .121 .846 .699 <i>p</i> .944 .258	LL .185 .077 .138 .101 .000 .151 .128 95% LL .162 .421	UL .815 .673 .758 .712 .511 .786 .747 6 CI UL .863 .979	AUC .200 .233 .250 .233 .100 .233 .200 AUC .667 .722	SE .151 .160 .161 .160 .114 .160 .151 SE .187 .169	.100 .144 .171 .144 .028 .144 .100 <i>p</i> .480 .346	LL .000 .000 .000 .000 .000 .000 .000 95% LL .300 .391	UL .495 .547 .565 .547 .323 .547 .495 6 CI UL 1.000 1.000	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI QuantiFERON Cut-off 500 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median)	AUC .500 .375 .448 .406 .250 .469 .438 AUC .513 .700 .550	SE .161 .152 .158 .156 .133 .162 .158 SE .179 .142 .180	1.000 .439 .747 .561 .121 .846 .699 p .944 .258 .777	LL .185 .077 .138 .101 .000 .151 .128 95% LL .162 .421 .198	UL .815 .673 .758 .712 .511 .786 .747 6 CI UL .863 .979 .902	AUC .200 .233 .250 .233 .100 .233 .200 AUC .667 .722 .722	SE .151 .160 .161 .160 .114 .160 .151 SE .187 .169 .169	.100 .144 .171 .144 .028 .144 .100 <i>p</i> .480 .346 .346	LL .000 .000 .000 .000 .000 .000 95% LL .300 .391 .391	UL .495 .547 .565 .547 .323 .547 .495 6 CI UL 1.000 1.000 1.000	
Cut-off 40 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median) IE-1 OI pp65 OI QuantiFERON Cut-off 500 copies/ml IE-1 Lo (Algo) pp65 Lo (Algo) IE-1 Lo (Median) pp65 Lo (Median)	AUC .500 .375 .448 .406 .250 .469 .438 AUC .513 .700 .550 .763	SE .161 .152 .158 .156 .133 .162 .158 SE .179 .142 .180 .134	1.000 .439 .747 .561 .121 .846 .699 p .944 .258 .777 .138	LL .185 .077 .138 .101 .000 .151 .128 95% LL .162 .421 .198 .500	UL .815 .673 .758 .712 .511 .786 .747 6 CI UL .863 .979 .902 1.000	AUC .200 .233 .250 .233 .100 .233 .200 AUC .667 .722 .722 .722	SE .151 .160 .161 .160 .114 .160 .151 SE .187 .169 .169 .169	.100 .144 .171 .144 .028 .144 .100 <i>p</i> .480 .346 .346 .346 .346	LL .000 .000 .000 .000 .000 .000 .000	UL .495 .547 .565 .547 .323 .547 .495 6 CI UL 1.000 1.000 1.000 1.000	

Supplementary Table 2. Receiver Operating Characteristic (ROC) curve analyses to define the cellular assay, which is most predictive of protection from CMV infection/reactivation in liver transplant recipients.

CMV infection/reactivation was either defined as \geq 40 copies or \geq 500 copies of CMV-DNA/ml. The upper panel considers all patients, the lower only high-risk patients [donor (D)+/recipient (R)- CMV-IgG serostatus prior to transplantation (D+/R-)]. CMV-specific ELISpot results were considered as spot forming units for CMV IE-1 and pp65 antigens, either at the end of antiviral prophylaxis (month 0) or at month 1. Patients who developed CMV infection/reactivation between end of prophylaxis and month 1 were excluded from the ROC curve analysis at month 1. Results of the T-Track CMV (Lophius Biosciences, Lo) were calculated using the algorithm provided by the manufacturer (Algo) or using median values. OI means results of the T-SPOT.*CMV* (Oxford Immunotec). Data sets also presented in Table 4 were marked grey. SE - standard error; CI - confidence interval; LL - lower limit; UL - upper limit.

Supplementary Table 3. Prec	lictive values of CMV-specific of	cellular assays in liver t	transplant recipients.
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Test	AUC	Cohort	Time point	Cut- off	Sensitivity	Specificity	n c	n t	nc/nt
IE-1 Lo (Algo)	.668	All	M0	5.5	100%	44%	19	51	0.37
pp65 Lo (Algo)	.669	All	M0	284	100%	7%	3	51	0.06
IE-1 Lo (Median)	.698	All	M0	5.5	100%	46%	20	51	0.39
pp65 Lo (Median)	.675	All	M0	342	100%	5%	2	51	0.04
IE-1 OI	.636	All	M0	91	100%	20%	8	50	0.16
pp65 OI	.744	All	M0	142	100%	46%	19	50	0.38
QuantiFERON	.568	All	M0	9.9	100%	22%	10	56	0.18
IE-1 Lo (Algo)	.762	All	M1	3.5	100%	59%	25	48	0.52
pp65 Lo (Algo)	.603	All	M1	470	100%	3%	1	48	0.02
IE-1 Lo (Median)	.772	All	M1	4.5	100%	59%	25	48	0.52
pp65 Lo (Median)	.610	All	M1	471	100%	3%	1	48	0.02
IE-1 OI	.659	All	M1	153	100%	15%	6	46	0.13
pp65 OI	.687	All	M1	311	100%	20%	8	45	0.18
QuantiFERON	.605	All	M1	32	100%	23%	9	47	0.19
IE-1 Lo (Algo)	.513	D+R-	M0	4.0	100%	10%	1	14	0.07
pp65 Lo (Algo)	.700	D+R-	M0	0.5	100%	40%	4	14	0.29
IE-1 Lo (Median)	.550	D+R-	M0	5.0	100%	10%	1	14	0.07
pp65 Lo (Median)	.763	D+R-	M0	1.5	100%	30%	3	14	0.21
IE-1 OI	.375	D+R-	M0	5.5	100%	10%	1	14	0.07
pp65 OI	.588	D+R-	M0	30	100%	10%	1	14	0.07
QuantiFERON	.550	D+R-	M0	13	100%	10%	1	14	0.07
IE-1 Lo (Algo)	.667	D+R-	M1	0.5	100%	33%	3	12	0.25
pp65 Lo (Algo)	.722	D+R-	M1	0.5	100%	44%	4	12	0.33
IE-1 Lo (Median)	.722	D+R-	M1	0.5	100%	44%	4	12	0.33
pp65 Lo (Median)	.722	D+R-	M1	0.5	100%	44%	4	12	0.33
IE-1 OI	.500	D+R-	M1	2.5	100%	33%	3	12	0.25
pp65 OI	.722	D+R-	M1	3.5	100%	44%	4	12	0.33
QuantiFERON	.667	D+R-	M1	19	100%	33%	3	12	0.25

It was analyzed how different CMV-specific cellular assays predicted the absence of CMV infection/reactivation. For this analysis, the cut-off for CMV infection/reactivation was set at 500 copies of CMV-DNA/ml. The table considers all cellular in vitro assays. It shows either data on all high and intermediate risk patients (All) or separately on high risk patients [donor (D)+ recipient (R)- CMV-IgG serostatus prior to transplantation]. CMV-specific ELISpot results were considered as spot forming units for CMV IE-1 and pp65 antigens, either at the end of antiviral prophylaxis (M0) or at month 1 (M1). Results of the T-Track CMV (Lophius Biosciences, Lo) were calculated using the algorithm provided by the manufacturer (Algo) or using median values. OI means results of the T-SPOT.*CMV* (Oxford Immunotec). Results of the QuantiFERON-CMV assay were given as IU/ml. Data sets also presented in Table 4 were marked grey. AUC - area under curve; n_c - number of patients exceeding the cut-off value; n_t - total number of patients.