Effecacy of DMT against placebo after one year of therapy (Rough estimates, can't compare)

Drug	Anualized relapse rate	EDSS progression	New MRI lesions	Relapse free (2ys)	Study
Placebo	45%	13%	8.1		
Avonex	33%			36%	INCOMIN
Betaseron	36%	13% (2ys)	3.3	51%	INCOMIN
Rebif	29%	15.2%		56%	
Copaxone	34%		3.3	59%	BEYOND
Gilenya	20%				
Tcfidera	17%	16%	2.6		
Lemtrada	18%	8% (2ys)		78%	
Tysabri	22%		0		MS1
Zinberta	21%	6%	2.4		
Ocrevus	15%	9.8%			OPERA I, II

PML risk with Tysabri

Three factors increase the risk:

- 1- Treatment > 2 years
 - a. JCV Ab negative \rightarrow < 1/1000
 - b. JCV Ab positive:
 - i. 1-24 months → <1/1000
 - ii. 25-48 months → 3/1000
 - iii. 49-72 months → 6/1000
 - c. Seroconversion rate is 3-6% annually
- 2- Prior treatment with immunosupressants (MTX, cyclophosphamide)
- 3- JCV antibodies

Antibody index	1-24 months	25-48 months	49-72 months
<= 0.9	1/10,000	3/10,000	4/10,000
<= 1.1	1/10,000	7/10,000	7/10,000
<= 1.3	1/10,000	1/1,000	1.2/1,000
<= 1.5	1/10,000	1.2/1,000	1.3/1,000
> 1.5	1/1,000	8.1/1,000	8.5/1,000