suppression, whereas 28 did not achieve viral suppression at 1 year after initiation of therapy.

Thus, our results suggest that hospitalization at the time of starting HAART is an additional factor favoring adherence. The following 3 underlying variables may have favored adherence to therapy: diagnosis of AIDS and, therefore, fear of death; rapid clinical improvement while receiving treatment; and immediate reassurance by physicians and nurses when patients experienced adverse effects during hospitalization. It remains to be seen whether such positive effects of initial hospitalization can be maintained during long-term follow-up.

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Extensively Drug-Resistant Tuberculosis Is Worse than Multidrug-Resistant Tuberculosis: Different Methodology and Settings, Same Results

To the Editor—We read with interest the article by Kim et al. [1] about the impact of extensively drug-resistant (XDR) tuberculosis (TB) on treatment outcomes of non–HIV-infected patients affected by multidrug-resistant (MDR) TB. Kim et al. [1] found, with univariate analysis, that patients with XDR TB had a borderline-significant higher probability of treatment failure and death than did patients with MDR TB (table 1). Multivariate analysis confirmed that XDR TB is a poor independent prognostic factor for treatment failure (OR, 4.46; 95% CI, 1.35–14.74). Two studies from our group had previously reached similar conclusions [2, 3]. Our first study found that patients with XDR TB in Italy and Germany, compared with patients with MDR TB, had a 5-fold increase in the risk of death (relative risk, 5.45; 95% CI, 1.95–15.27; $P < .01$), required longer hospitalization (mean duration ± SD, 241.2 ± 177.0 vs. 99.1 ± 85.9 days; $P < .001$), had longer treatment duration (30.3 ± 29.4 vs. 15.0 ± 23.8 months; $P < .05$), and, for the few patients whose sputum and smear converted from positive to negative, a longer time to smear or culture conversion ($P < .01$) [2]. The second study (including additional patients from Estonia and Russia) found that patients with XDR TB had a relative risk of 1.58 to die or have treatment failure, compared with patients with MDR TB resistant to all first-line drugs (95% CI, 1.14–2.20; $P < .05$), and a relative risk of 2.61 (95% CI, 1.45–4.69; $P < .001$), compared with patients with MDR TB for whom susceptibility to ⩾1 first-line drug still existed [3]. Interestingly, the results of the studies from the 2 groups are consistent, although the definitions used were slightly different: Migliori et al. [2] used the World Health Organization definitions of treatment success and failure [4, 5], and Kim et al. [1] applied the definitions proposed by Laserson et al. [6]. Furthermore, Kim et al. [1] (and not Migliori et al. [2])

Table 1. Comparison of outcomes of patients with extensively drug-resistant (XDR) and multidrug-resistant (MDR) tuberculosis (TB).

	Results of Kim et al. [1]				Results of Migliori et al. [3]			
	No. (%) of patients		Univariate analysis		No. (%) of patients		Univariate analysis	
Outcome	XDR TB (n = 43)	MDR TB (n = 168)	RR (95% CI)	P	XDR TB (n = 64)	MDR TB (n = 361)	RR (95% CI)	P
Treatment success								
Overall	23 (53.5)	109 (64.9)			22 (34.4)	165 (45.7)		
Cured	23 (53.5)	84 (50.0)			19 (29.7)	134 (37.1)		
Treatment completed	…	25 (14.9)			3 (4.7)	31 (8.6)		
Treatment failure								
Overall	19 (44.2)	46 (27.4)	1.68 (0.99–2.85)	.057	26 (40.6)	75 (20.8)	2.19 (1.31–3.66)	.002
Relapse	2 (4.7)	4 (2.4)			0	0		
Failure	11 (25.6)	29 (17.3)	1.58 (0.84–2.95)	.16	12 (18.7)	32 (8.9)	2.32 (1.24–4.32)	.008
Death	6 (14.0)	13 (7.7)	1.81 (0.85–3.87)	.143	14 (21.9)	43 (11.9)	2.09 (1.14–3.81)	.017

NOTE. RR, relative risk.

included death with treatment failure. To make a contribution toward the use of standardized definitions and to allow a better comparison of the data from the 2 groups, we recalculated our treatment outcomes from the 4-country study on the basis of the methodology of Kim et al. [1] (table 1). With the univariate analysis, patients with XDR TB had a significantly higher probability of treatment failure than did patients with MDR TB (relative risk, 2.19; 95% CI, 1.31–3.66; $P = .002$). According to our data, patients with XDR TB had a higher probability of death and treatment failure than did patients with MDR TB, even when the 2 outcomes were analyzed separately (table 1). With the multiple regression analysis, the presence of XDR was an independent risk factor for both death (OR, 2.07; 95% CI 1.05–4.05; $P < .034$) and treatment failure (OR, 2.37; 95% CI, 1.14–4.89; $P < .02$).

The different findings related to some of the patient characteristics of the 2 data sets (e.g., radiography findings, number of drugs, and treatment duration) suggest that our patients with MDR TB (especially those from Eastern Europe) have more-severe disease than do those of Kim et al. [1]. Moreover, the consistency of outcomes from both studies suggests that (1) results are robust and (2) XDR TB has a negative clinical and prognostic significance, even in patients with different susceptibility profiles and from different settings (e.g., Korea and Eastern and Western Europe). While we wait for the development of new drugs and rapid diagnostic procedures, there should be a prompt and globally coordinated public health response, to prevent further development of drug resistance.

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