

Tobacco Industry Profits From Smoking Images in the Movies

To the Editor.—

Previous studies have estimated that images of smoking in the movies lead ~390 000 adolescents to start smoking each year,¹ which creates a regular stream of profits for the cigarette companies. Using data on average revenue and operating income (as a measure of profit) per smoker by Philip Morris USA (PMUSA) and Reynolds American Inc (RJR), we calculate the present value of the revenues and operating income delivered to the cigarette companies by images of smoking in the movies each year.

Total revenues and operating income (as a measure of profit) for both PMUSA and RJR from 2001–2004 were obtained from their annual reports^{2,3} and inflated to 2004 dollars using the Consumer Price Index. Total PMUSA customers were estimated to be 23 million by multiplying the total number of adult smokers (~46 million⁴) by the PMUSA market share (~50%).² Total revenues and total profit for each year were then divided by the number of PMUSA customers to determine the average revenue and profit that PMUSA receives per smoker. The average revenue and profit in each year were then averaged across time to estimate the general average revenue (\$852) and profit (\$216) per smoker per year. RJR market share was ~20%;³ the same procedure was performed with data from RJR to estimate the average revenue (\$773) and income (\$92) per smoker per year. (This calculation included adjusting the 2003 operating income upward by \$4086 million for a 1-time accounting charge for the valuation of the RJR trademarks.³) The smoker-weighted average for average revenue and profit for these 2 companies is \$830 and \$181, respectively. Because these are the 2 largest companies in the US tobacco industry and have the least amount of year-to-year variability in the industry, these smoker-weighted revenue and profit estimates are good estimates for the entire industry.

The smoker-weighted average revenue and profit per smoker per year were then used in a present-value calculation to determine the present value of revenues and profits assuming that a new smoker will smoke for 18 years.⁵ Using a 5% discount rate, the 18-year revenues and profit per smoker were \$10 527 and \$2291, respectively.

The present value of the lifetime revenues and profit created each year by images of smoking in the movies is calculated by multiplying the total number of new regular smokers (390 000) by the total present value of revenues and profit over the lifetime of an average smoker. This calculation estimates that each year, images of smoking in the movies create a present value of \$4.1 billion in revenues and \$894 million in profits to the US tobacco industry. Because American movies are distributed throughout

the world and the tobacco companies operate on a global scale, the global value of smoking in the movies to the tobacco industry is much larger.

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Primary Operative Versus Nonoperative Therapy for Pediatric Empyema

To the Editor.—

The review by Avansino et al¹ addresses the important management question of what treatment to offer children with pleural collections complicating pneumonia.

It is unfortunate that the authors performed a meta-analysis without assessment of study quality. Appropriate meta-analysis would examine prospective controlled studies, preferably with randomization, with analysis of outcomes according to intention to treat. This would have resulted in inclusion of only 2^{2,3} of the 54 studies listed in their Table 1 and 1² of the 25 studies listed in their Table 2, almost certainly yielding different results from those described. The remainder of the studies included are observational, descriptive, or retrospective reviews of medical charts. In addition, it is unclear why the study by Thomson et al,⁴ the only prospective, double-blind, randomized, placebo-controlled trial in this field, is cited in the reference list but not included in the tables contributing to the meta-analysis. This study demonstrates benefit of fibrinolytic therapy over chest-tube drainage alone.