

**Table S1: Summary Table: Assessment of Individual Studies by Outcome**

Study Characteristics				Key Findings [Magnitude of effect (HR, OR, RR, RD & 95% CI) or other description]	Quality of Evidence for Individual Studies			Evidence from Economic Evaluation (e.g., cost-effectiveness) (Yes or No; if Yes, brief description and rating of quality of study (Level 1, 2, or 3)**	Comments  [Including comments on: 1) WHO staging/CD4 count and ART status 2) Duration of efficacy 3) Adherence 4) Adverse events]
					External and Internal Validity (1 = Good; 2 = Fair; 3 = Poor)		Overall Quality of Evidence Rating* (1 = Strong; 2 = Medium; 3 = Weak)		
Citation	Study Design (e.g., RCT)	Country, Study Period	No. Participants		Internal Validity (Bias)	External Validity (Generalizability)			
<b>Mortality</b>									
Akolo, C., et al., 2010. <sup>28</sup>	Meta-analysis	Multi-country Update of previous review, studies from 1993 through April 2008	12 RCTs with a total of 8,578 PLHIV ≥13 years without active TB, randomized to TB preventive therapy and placebo or alternative regimens	No evidence that preventive therapy reduced all-cause mortality, RR= 0.94 (0.85–1.05) or mortality amongst those who were PPD positive, RR = 0.80 (0.63–1.02). No differences in the effect on death by study drug with the exception of INH+RIF, which was associated with a significant reduction in the risk of death, OR = 0.69 (0.50–0.95).	1-Good	1-Good	1-Strong	No	Adherence: Some evidence that adherence improves with shorter duration of prophylaxis. Adverse events: Preventive therapy led to more adverse events compared to placebo (6 trials; 5,525 participants; RR = 2.55, (1.70–3.85). The likelihood of stopping treatment due to adverse effects was higher for combination therapies than for INH monotherapy.
Bucher, H.C., et al., 1999. <sup>29</sup>	Meta-analysis	Multi-country Articles published from 1993 to 1998; Mean	7 RCTs included in the meta-analysis: 2,367 PLHIV received INH and 2,162	No difference in death rate for INH vs. placebo group: RR = 0.94 (0.83–1.07) For 5 trials with TST results: TST positive RR = 0.79 (0.37–1.70) TST negative RR = 1.02	2-Fair	2-Fair	1-Strong	No	Adverse events: No significant difference in all side effects from 4 trials (INH vs. placebo), RR = 1.36 (1.00-1.86) or drug-limiting toxicity, RR = 1.66 (0.83-3.32). There was

		follow-up; 0.4-3.2 years	received placebo	(0.90–1.17). No statistically significant difference between RR of death among TST positive and TST negative ( $p = 0.52$ ).					noted to be an increase in hepatotoxicity, defined as twofold increase in AST, RR = 1.80 (1.05-3.10).
Charalambous, S., et al., 2010. <sup>22</sup>	Cohort study	South Africa Jan. 2004 – Dec. 2007; 12-month follow-up period	3,270 ART-naïve adults starting ART as part of workplace ART program	IPT in combination with ART reduced mortality compared to ART alone in ART-naïve population, uOR = 0.32 (0.24–0.49), aOR = 0.50 (0.32–0.80).	2-Fair	2-Fair	2-Medium	No	Note that the two cohorts (receiving INH and not) were statistically different across various demographic and clinical characteristics. No significant difference in mortality noted when results stratified by CD4.
Churchyard, G.J., et al., 2003. <sup>27</sup>	Cohort study	South Africa Enrollment Dec. 2000 for IPT cohort and July 2001 for control cohort; time at risk median 0.91 years for IPT group and 0.41 years for control group	559 HIV-infected miners with history of successfully treated TB; 338 men getting secondary IPT and 221 control cohort	Mortality not significantly reduced in IPT cohort (mortality rate ratio = 0.7, 0.39–1.24), even after accounting for CD4/cotrimoxazole provision. Number of person-years of IPT required to prevent 1 case of recurrent TB among individuals with a CD4 cell count < 200 x 10 <sup>6</sup> cells/l, and > or = 200 x 10 <sup>6</sup> cells/l was 5 and 19, respectively.	2-Fair	2-Fair	2-Medium	No	Secondary prophylaxis study Adverse events: IPT interrupted and then restarted because of rash (n = 2), nausea (n = 1) and abdominal pain (n = 1); stopped and not restarted in 3 patients because of rash; no episodes of hepatitis or peripheral neuropathy.
de Pinho, A.M., et al., 2001. <sup>23</sup>	Prospective cohort analysis	Brazil Enrollment Jan 1991 to Dec. 1994; enrollment follow-up Sept. 1998; median follow-up	297 TST-positive PLHIV; 128 given anti-TB chemoprophylaxis (83 INH, 45 RIF+PZA);	Chemoprophylaxis associated with significantly lower risk of death, HR = 0.31 (0.13–0.75) including after adjusting for baseline CD4 aHR 0.24 (0.09–0.65)	1-Good	1-Good	2-Medium	No	Chemoprophylaxis included 2 groups: 1) INH x 12 months and 2) RIF+PZA x 2 months.

		43.6 months	169 did not receive either.						
Fitzgerald, D.W., et al., 2000. <sup>13</sup>	Randomized, placebo-controlled trial	Haiti Enrollment completed July 1998, follow-up completed July 1999;	233 adults (≥18 years) 142 PLHIV completing treatment for TB; 74 given placebo and 68 given INH.	No difference in mortality noted with 17 deaths in each group. RR = 0.93 (0.51–1.65).	2-Fair	2-Fair	2-Medium	No	Secondary prophylaxis study: Used 12 months of post-treatment INH.
Fitzgerald, D.W., et al., 2001. <sup>14</sup>	Randomized, placebo-controlled trial	Haiti Enrollment completed Dec. 1998, follow-up completed Dec. 1999; mean follow-up 2.4-2.5 years	237 PPD-negative PLHIV (≥18 years)	No difference in mortality for INH x 12 months vs. placebo, RR = 1.05 (0.55–2.03).	2-Fair	2-Fair	1-Strong	No	>90% of persons who were PPD negative (n = 146) responded to candida/MMR (n = 133), so anergy did not appear to be common.
Hawken, M.P., et al., 1997. <sup>15</sup>	Randomized, double-blind, controlled trial	Kenya April 1992–March 1994; median follow-up 1.83 years	684 PLHIV (age 14–65)	Mortality of INH vs. placebo cRR = 1.11 (0.77–1.68); aRR = 1.18 (0.79–1.75); If TST positive, aRR = 0.33 (0.09–1.23); If TST negative, aRR = 1.39 (0.9–2.12)	2-Fair	1-Good	1-Strong	No	Median CD4 = 322 (INH) and 346 (placebo); Lack of significance partly attributed to small numbers and poor adherence.. Adherence: Based on tablet count: 42% missed <1 wk, 31% missed >52 wks; Adverse events: No significant difference in adverse events for INH vs. placebo, RR = 1.41 (0.78–2.54).
Johnson, J.L., et al.,	Randomized, double-	Uganda March 1993	2,736 PLHIV (2,018 PPD-	No difference in mortality among the treatment arms	1-Good	2-Fair	1-Strong	No	Continuation study as follow-up to Whalen et al.

2001. <sup>16</sup>	blind, controlled trial	- April 1995, mean follow-up 1.6 in anergic cohort and 2 years among PPD-positive individuals	positive, 718 anergic)	for either the PPD-positive or anergic cohorts.					Compared three regimens: INH daily x 6 months, INH+RIF x 3 months, and INH+RIF+PZA x 3 months..
Kabali, C., et al., 2011. <sup>24</sup>	Cohort study nested within a randomized trial	Tanzania Sept. 2001-Jan. 2008	588 TST-positive PLHIV in cohort of PLHIV with baseline CD4 >200, 488 completed 6 months of IPT and 70 did not	Completion of IPT associated with increased survival in HIV-infected adults with CD4>200 and positive TST, crude HR=0.4 (0.2-0.8) and equivalent adjusted HR.	1-Good	1-Good	2-Medium	No	
Khawcha roenporn, T., et al., 2012. <sup>25</sup>	Prospective, non-randomized intervention trial	Thailand Jan. 2004-Jan. 2008, 4 years	400 PLHIV, 200 underwent TST and received IPT if positive; 200 not screened	No difference in all-cause mortality (3%) between those receiving IPT and those not.	2-Fair	2-Fair	2-Medium	No	Adherence: In IPT group only 17 participants (9%) had reactive TST< and of these, 14 (82%) completed IPT. Adverse events: No significant adverse drug reactions or treatment interruptions reported.
Lim, H.J., et al., 2006. <sup>17</sup>	Randomized, double-blind, placebo-controlled trial	Uganda Enrollment period: March 1993-April 1995; follow-up: last clinic visit before Aug. 1998	2,736 PLHIV randomized based on PPD status	No difference noted in relative hazard of AIDS Progression or death when comparing placebo to INH (HR = 1.02, 0.80-1.3); INH+RIF x 3 months (HR = 0.91, 0.71-1.17); or INH+RIF+PZA x 3 months (HR = 0.90, 0.72-1.12).	2-Fair	2-Fair	1-Strong	No	Study was designed so that PPD positive (>5mm) pts assigned to INH daily x 6 months (n = 536), INH+RIF daily x 3 months (n = 556), INH+RIF+PZA x 3 months (n = 464) or placebo (n = 323). Patients with cutaneous anergy randomly assigned to INH

									(n = 395) or placebo (n = 323) daily x 6 months.
Mohammed, A., et al., 2007. <sup>18</sup>	Randomized, double-blind, placebo-controlled trial	South Africa Study end: Dec 2004; Median follow-up 350 days in INH group, 358 days in placebo group and 1,130 days in INH open-label arm	118 PLHIV, 20 TST positive (received open-label INH) 98 TST negative (randomized to INH vs. placebo)	No significant differences in death rate between INH and placebo groups (14/48 vs.18/50, p = 0.318).	1-Good	1-Good	1-Strong	No	Adherence: Median adherence was 85% in randomized trial arms (similar for INH and placebo) and 92% in open-label INH arm. Adverse events: 3 cases of peripheral neuropathy occurred in the INH arm and none in the placebo arm (p = 0.114).
Mwanga, A., et al., 1998. <sup>19</sup>	Randomized, double-blind, controlled trial	Zambia Aug. 1992-July 1994; Median follow-up 1.8 years	1,053 PLHIV (age ≥ 15 years), 352 on placebo, 350 on INH, and 350 on RIF+PZA	No significant difference noted in mortality rate for either group: INH vs. placebo: Mortality cRR = 1.05 (0.73–1.50); RIF+PZA vs. placebo: Mortality cRR = 1.24 (0.87–1.76);	2-Fair	2-Fair	1-Strong	No	Adherence: Overall compliance was 74%. Adverse events: 29 subjects (3%) taken off of regimen due to adverse events..
Quigley, M.A., et al., 2001. <sup>26</sup>	RCT converted to cohort study	Zambia Aug. 1992-July 1994; Mean follow-up 3 years (up to 1999)	1,053 PLHIV originally enrolled: 112 initial placebo patients placed on INH x 6 months; 44 placebo patients refused or ineligible for IPT	No significant difference noted in mortality rate for either group: For INH vs. placebo mortality RR = 0.95 (0.71–1.28); For RIF+PZA vs. placebo mortality cRR = 1.24 (0.94–1.65).	2-Fair	2-Fair	2-Medium	No	Follow-up study to Mwanga et al. Analysis done as ITT using original randomized arms.
Rangaka M.X., et	Randomized, placebo-	South Africa	1,369 ART-treated	No significant difference noted in all-cause mortality	1-Good	1-Good	1-Strong	No	Median CD4 = 216 Adherence: No difference

al., 2014. <sup>21</sup>	controlled trial	Jan 2008-Sept 2011; Median follow-up 2.5 yrs	PLHIV (age ≥ 18 years), 667 on placebo, 662 on INH	for INH vs. placebo: HR = 0.72 (0.34-1.34)					in median months on study drug or total doses dispensed Adverse events: No difference in discontinuation of study drug due to adverse events
Whalen, C.C., et al., 1997. <sup>20</sup>	Randomized, placebo-controlled trial	Uganda March 1993-April 1995; designed for 3-year follow-up, but stopped due to success of intervention	2,736 PLHIV randomized based on PPD status	Cumulative mortality rate was 20%. Mortality did not differ between groups: INH vs. placebo, RR = 0.9 (0.6-1.2); INH+RIF vs. placebo, RR = 0.8 (0.5-1.2); INH+RIF+PZA vs. placebo, RR = 0.96 (0.7-1.4); Overall mortality was higher in anergic cohort (p = 0.001), INH vs. placebo RR = 1.05 (0.77-1.42).	1-Good	2-Fair	1-Strong	No	Study compared 3 different prophylactic regimens with placebo for PPD positive participants: INH daily x 6mo, INH+RIF daily x 3 months, INH+RIF+PZA daily x 3 months Adherence: Of 90% of participants tested for INH urine metabolites (scheduled and random) 75% tested positive. Adverse events: Discontinuation rate of 0.2% for placebo, 0.6% for INH, 2.3% for INH+RIF, and 5.6% for INH+RIF+PZA.
Wilkinson, D., 1998. <sup>30</sup>	Meta-analysis	Multi-country Articles from 1989-1997; follow-up 15-33 months	4 trials with 4,055 PLHIV (from U.S., Haiti, Kenya, Uganda) comparing INH to placebo	Mortality was significantly reduced in TST-positive individuals, but not TST negatives: INH + other prophylaxis vs. placebo, mortality RR = 0.93 (0.83-1.05); For TST positives, RR = 0.73 (0.57-0.95); For TST negatives RR = 1.02 (0.89-1.17).	2-Fair	2-Fair	1-Strong	No	Adherence: Adherence estimated at 63-75%. Adverse events: Adverse drug reactions higher in treatment group, but not significantly RR = 1.45 (0.98-2.14).
Durovni, B., et al., 2013. <sup>31</sup>	Stepped-wedge, cluster-randomized trial	Brazil Sept. 2005-Aug. 2009	12,816 PLHIV seen in one of 29 city health department clinics	The multi-component intervention reduced the combination of TB and death in participants, HR = 0.76 (0.66-0.87), aHR = 0.69 (0.57-0.83)	2-Fair	2-Fair	2-Medium	No	Intervention in this study had multiple components, including training on TB screening, use of TST, IPT, and TB treatment. Median CD4 at first visit was 426.

			during study period						Adherence: Of patients that tested TST positive, 82% began IPT, and 85% of these completed IPT. Adverse events: 22 (1.5%) of participants experienced treatment interruptions due to adverse events.
Dowdy, D.W., et al., 2014. <sup>32</sup>	Modeling study	Brazil Modeled 5 year period	Population of 4.1 million;	Providing IPT to 20% of eligible PLHIV per year decreased TB-related mortality by 14% over the course of 5 years	2-Fair	2-Fair	2-Medium		Follow-on to Durovoni et al estimating impact of intervention if continued expansion at same rate over 5 years.
Samandari, T., et al., 2011. <sup>33</sup>	Randomized, double-blind, placebo-controlled trial	Botswana Nov. 2004-July 2006 with 3 years of follow-up	1,995 PLHIV randomly assigned to 6 months INH+30 months of masked placebo (989) or 6 months INH+30 months of masked INH (1006).	Death rate was not significantly decreased in all patients who received 36 months vs. 6 months of treatment, but was significantly decreased in participants who were TST positive: Overall HR = 1.00 (0.64–1.56) TST positive HR = 0.32 (0.11–0.90) TST negative HR = 1.28 (0.76–2.15).	1-Good	2-Fair	1-Strong	No	Duration study: Benefit of 6-months of INH decreased approx. 200 days after completion. Adherence: 821/989 (83%) persons completed INH x 6 months + placebo x 30 months, 834/1,006 (83%) persons completed INH x 36 months. Adverse events: 1% of participants in placebo group vs. 1.3% in intervention group had severe adverse events during the 30-month extension period (p =0.36).
Swaminathan, S., et al., 2012. <sup>34</sup>	Randomized, open-label controlled trial	India March 2001-October 20025	712 PLHIV randomized to INH 300 mg+ethambutol 800 mg for 6 months; or INH 300 mg for 36 months	There was no difference in crude mortality for INH+ethambutol vs. INH x 36 months, irrespective of TST status: Overall mortality aIRR = 1.20 (0.66–2.18) For TST positive: aIRR = 1.51 (0.56–4.02) For TST negative: aIRR = 1.10 (0.50–2.41).	1-Good	2-Fair	2-Medium	No	

Gordin, F., et al., 2000. <sup>35</sup>	Randomized, open-label controlled trial	Multi-country Sept. 1991-May 1996; follow-up Oct 1997; mean follow-up 37 months	1,583 TST-positive PLHIV $\geq$ 13 years in U.S., Mexico, Haiti and Brazil	No significant difference in the risk of death between the two regimen, uRR = 0.87 (0.69–1.09), aRR=0.86 (0.68–1.08).	1-Good	1-Good	2-Medium	No	Median CD4 on entry: 426. No difference noted when stratified by presence or absence of AIDS. Adherence: 80% completed RIF+PZA compared to 69% IPT completion ( $p = <0.001$ ). Adverse events: Study drug discontinued in 10% of RIF+PZA and 6% of INH group ( $p = 0.01$ ), though abnormal LFTs more common in INH group ( $p = 0.02$ ).
Halsey, N.A., et al., 1998. <sup>36</sup>	Randomized clinical trial	Haiti Enrollment April 1990-July 1992; follow-up up to 4 years	730 TST-positive PLHIV assigned to INHx6 (370) or RIF+PZA x 2 months (380)	No difference in mortality rate with 72 and 71 deaths respectively ( $p = 0.85$ ).	2-Fair	2-Fair	1-Strong	No	Adherence: Identical number of patients dropped during the first two months of therapy, but adherence was better in the RIF+PZA group compared to INH due to duration of therapy. Adverse events: No serious adverse reactions or discontinuations reported.
Martinson, N.A., et al., 2011. <sup>37</sup>	Randomized clinical trial	South Africa Sept. 2002-June 2005 with a median follow-up of 4 years	1,528 TST-positive PLHIV. 1,150 randomized to INH+RFP x 3 months (329), INH+RIF x 3 months (329), INH x 6 months (328), and continuous INH (up to 6 years) (164)	No significant difference in the risk of death between the 2 regimens, uRR = 0.87 (0.69–1.09), aRR = 0.86 (0.68–1.08).	2-Fair	2-Fair	1-Strong	No	Adherence: Proportion taking at least 90% of study medications varied by group (96% for INH+RFP, 95% for INH+RIF, 83% for INH x 6 months, and 89% for continuous INH during follow-up) . Adverse events: Rates of serious adverse events also varied by group (8.7 per 100 person-years in the INH+RFP group, 10.6 in the INH+RIF group, 15.4 in the

									INH x 6 months group and 18.4 in the continuous-INH group).
Alaei, K., et al., 2002. <sup>38</sup>	Prospective cohort study	Iran October 1997-April 1998, with 3-year follow-up	246 TST-positive, HIV-infected male prisoners with history of injection drug use	During the 3-year follow-up, 41 (17%) of participants died.	3-Poor	3-Poor	2-Medium	No	No comparison group. 94 cases (38%) were loss to follow-up.
Mosimane, B., et al., 2010. <sup>39</sup>	Cohort study	Botswana Enrollment Nov. 2004-June 2006	1,995 PLHIV (age ≥ 18 years) without acute illness, or history of TB/previous receipt of IPT	20 patients (1%) died while on IPT 9 of 16 (56%) deaths with sufficient information were due to AIDS-defining illnesses. (Three deaths were categorized as possible TB deaths.)	2-Fair	2-Fair	2-Medium	No	No comparison group. Adherence: 86% of clients completed the 6-month course of IPT, and 91% of those with pill count data (1375/1511) to ≥80% of their pills. Adverse events: 28 (1.4%) of participants were reported as having serious adverse events including 1 death from hepatic encephalopathy.
Bell, J.C., et al., 1999. <sup>40</sup>	Markov model	Uganda	Hypothetical cohort of 100,000 TST-positive PLHIV	All three regimens extend life expectancy and QALYs. RIF+PZA x 2 months resulted in better health outcomes than INH x 6 months and INH/RIF x 3 months.	NA	NA	NA	Yes – Level 2 All 3 regimens were less expensive than no preventive therapy. Providing INH x 6 months saves \$24.16 per person, relative to the other regimens.	Modeled comparison of INH x 6 months vs. INH+RIF x 3 months vs. INH+RIF+PZA x 2 months vs. no prophylaxis. Separate estimates made based on: 1) TB cases, 2) TB + social costs, 3) TB + social costs + secondary infections. The cost-effectiveness ratios are sensitive to assumptions about costs, effectiveness of intervention, and number of secondary cases.

Pho, M.T., et al., 2012. <sup>41</sup>	Trial-based cost-effectiveness analysis	India Modeled period of 3 and 10 years and projected life expectancy	Hypothetical cohort of 100 person-years (PY)	Six months of INH+ethambutol resulted in an estimated increased life expectancy of 0.8 months (at a cost of \$100). 36 months of INH increased life expectancy by 0.2 months at a cost of \$55.	NA	NA	NA	Yes-Level 2 INH+ethambutol was deemed cost-effective with an incremental cost-effectiveness ratio (ICER) of \$1,490/year of life saved (YLS). 36 months of INH had an ICER of \$3120/YLS	Evaluated life expectancy, TB incidence, cost, and ICER in patients receiving INH+ethambutol x 6 months vs. INH x 36 months in India; WHO suggests that an IPT strategy is “cost-effective” when the ICER is <3x the GDP per capita (which is \$980 in India).
Shrestha, R.K., et al., 2007. <sup>42</sup>	Markov cohort simulation		Modeled	IPT program targeted based on TST resulted in an additional 11 quality-adjusted life years (QALYs) per 100-HIV infected clients. Providing IPT without using TST screening resulted in an additional 30 QALYs per 100-HIV infected clients.	NA	NA	NA	Yes-Level 2 Cost-utility was \$83 per QALY gained using TST and \$89 per QALY gained without using TST at 6 months if 6 months of IPT were provided	Information modeled effect on QALYs using actual program data (patient outcomes and costs) collected from IPT program that was implemented using the TST strategy at the AIDS Information Center in Uganda; TST sensitivity and specificity were based on published literature.
<b>Morbidity</b>									
Akolo, C., et al., 2010. <sup>28</sup>	Meta-analysis	Multi-country Update of previous review, studies from 1993 through April 2008	12 RCTs with a total of 8,578 PLHIV ≥13 years without active TB, randomized to TB	INH reduced incidence of active TB by 33% compared to placebo: RR=0.67, 0.51–0.87. For TST positive, INH reduced the risk of active TB by 62%: RR=0.38, 0.25–0.57. No significant effect noted	1-Good	1-Good	1-Strong	No	Adherence: Some evidence that adherence improves with shorter duration of prophylaxis Adverse events: Preventive therapy led to more adverse events compared to placebo (6 trials; 5525 participants; RR=2.55,

			preventive therapy and placebo or alternative regimens	in TST negative persons: R= 0.89, 0.64–1.24. No significant difference in effectiveness of INH compared to other preventive regimens (including RIF+PZA, INH+RIF, and INH+RIF+PZA).					(1.70–3.85). The likelihood of stopping treatment due to adverse effects was higher for combination therapies than for INH monotherapy.
Bucher, H.C., et al., 1999. <sup>29</sup>	Meta-analysis	Multi-country Articles published from 1993 to 1998; mean follow-up, 0.4-3.2 years	7 RCTs included in the meta-analysis: 2,367 PLHIV received INH and 2,162 received placebo	Significant reduction in TB incidence noted for all patients combined (RR = 0.58, 0.43–0.8), and TST positive individuals (RR = 0.40, 0.24–0.65), but not TST negative individuals, (RR = 0.84, 0.54–1.30)	2-Fair	2-Fair	1-Strong	No	Adverse events: No significant difference in all side effects from 4 trials (INH vs. placebo), RR = 1.36 (1.00-1.86) or drug-limiting toxicity, RR = 1.66 (0.83-3.32); There was noted to be an increase in hepatotoxicity, defined as twofold increase in AST, RR = 1.80 (1.05-3.10).
Churchyard, G.J., et al., 2003. <sup>27</sup>	Cohort study	South Africa Started Dec. 2000 for IPT cohort and July 2001 for control cohort, time at risk median 0.91 years for IPT group and 0.41 years for control group	559 HIV-infected miners with hx of successfully treated TB; 338 men getting secondary IPT and 221 control cohort	Recurrent TB reduced by 55% in persons receiving IPT, IRR = 0.45 (0.26–0.78). IPT had greater effect in men with only 1 past episode of TB vs. more episodes (p=0.03) and in men with previously culture confirmed MTB (p=0.001).	2-Fair	2-Fair	2-Medium	No	Secondary prophylaxis study Adverse events: IPT interrupted and then restarted because of rash (n = 2), nausea (n = 1) and abdominal pain (n = 1); stopped and not restarted in 3 patients because of rash; no episodes of hepatitis or peripheral neuropathy.
de Pinho, A.M., et al.,	Cohort study	Brazil Enrollment Jan 1991	297 TST-positive PLHIV; 128	Chemoprophylaxis was associated with significant reduction in risk of	1-Good	1-Good	2-Medium	No	Chemoprophylaxis included 2 groups: 1) INH x 12 months and 2) RIF+PZA

2001. <sup>23</sup>		to Dec. 1994; enrollment follow-up Sept. 1998; median follow-up 43.6 months	given anti-TB chemoprophylaxis (83 INH, 45 RIF+PZA); 169 did not receive either.	developing TB (OR = 0.43, 0.18–0.99) and similar result observed after adjustment for CD4 count (OR = 0.38, 0.14–1.04).						x 2 months.
Fitzgerald, D.W., et al., 2000. <sup>13</sup>	Randomized, placebo-controlled trial	Haiti 1998	233 adults (≥18 years) 142 PLHIV completing treatment for TB; 74 given placebo and 68 given INH.	TB incidence was significantly reduced in HIV-positive individuals with rate of 7.8 vs 1.4 in patients on INH vs. placebo, RR=0.18 (0.4–0.83)	2-Fair	2-Fair	2-Medium	No		Secondary Prophylaxis Study: Used 12 months of post-treatment INH.
Fitzgerald, D.W., et al., 2001. <sup>14</sup>	Randomized, placebo-controlled trial	Haiti Enrollment completed Dec. 1998, follow-up completed Dec. 1999; mean follow-up 2.4-2.5 years	237 PPD-negative PLHIV (≥18 years).	No difference in incidence of TB disease noted for INH x 12 months, RR=1.27 (0.36–4.37)	2-Fair	2-Fair	1-Strong	No		>90% of persons who were PPD negative (n = 146) responded to candida/MMR (n = 133), so anergy did not appear to be common.
Golub, J.E., et al., 2007. <sup>44</sup>	Retrospective cohort study	Brazil Sept. 2003-Sept. 2005	11,026 PLHIV; Comparison made based of time on therapy, time on IPT only, time on ART only,	Both IPT and ART led to a reduction in TB incidence, but the two combined were significantly more likely to reduce TB incidence: ART-only RH = 0.55 (0.45–0.68) IPT only, RH = 0.36 (0.15–0.89)	2-Fair	2-Fair	2-Medium	No		Median CD4 cell count was 365. 74% of patients received ART. ~80% of those receiving IPT were TST positive. Adherence: IPT completion rate 76%.

			and time on both.	IPT+ART, RH = 0.23 (0.12–0.45). After adjusting for age, CD4, and previous TB, IPT alone does not remain significant, but IPT+ART does: IPT only, aRH = 0.57 (0.18–1.82) IPT+ART, aRH = 0.24 (0.11–0.53)					
Golub, J.E., et al., 2009. <sup>43</sup>	Prospective cohort study	South Africa June 2003–Dec. 2007	2,778 PLHIV (≥18 years); Total 4,287 person-years follow-up (2,815 treatment-naïve, 954 HAART only, 427 IPT only, 132 both IPT and HAART)	IPT alone did not significantly reduce TB in patients who were not on ART, but did significantly reduce TB incidence when combined with ART: IPT only (no ART), HR = 0.71 (0.45–1.10); aHR = 0.87 (0.55–1.36) IPT+ART vs. ART alone: HR = 0.14 (0.02–1.03) vs. 0.62 (0.4–0.87); aHR = .11 (0.02–0.78) vs. 0.36 (0.25–0.51).	2-Fair	2-Fair	2-Medium	No	Median baseline CD4 = 266. 79% had TST done, and 96% of them were TST positive. Adherence: Completion rate was 59%; ITT analysis done.
Hawken, M.P., et al., 1997. <sup>15</sup>	Randomized, double-blind, controlled trial	Kenya April 1992–March 1994; median follow-up 1.83 yrs	684 PLHIV (age 14–65)	TB incidence was not significantly reduced in INH vs. placebo for any group: Overall cRR = 1.11 (0.64–1.98); aRR = 0.92 (0.49–1.71). For TST positive aRR = 0.6 (0.23–1.6), and for TST negative aRR = 1.23 (0.55–2.76).	2-Fair	1-Good	1-Strong	No	Median CD4=322 (INH) and 346 (placebo); Lack of significance partly attributed to small numbers and poor adherence. Adherence: Based on tablet count: 42% missed <1 week, 31% missed >52 weeks; Adverse events: No significant difference in adverse events for INH vs.

									placebo, RR = 1.41 (0.78-2.54)
Johnson, J.L., et al., 2001. <sup>16</sup>	Randomized, double-blind, controlled trial	Uganda March 1993-April 1995; mean follow-up 1.6 in anergic cohort and 2 years among PPD-positive individuals	2,736 PLHIV (2,018 PPD-positive, 718 anergic)	No difference using IPT, but combination regimens did reduce TB incidence. PPD-positive group (3 regimen vs. placebo): INH, RR = 0.76 (0.48-1.20), aRR = 0.67 (0.42-1.07) INH+RIF, RR = 0.46 (0.48-0.77) , aRR = 0.49 (0.29-0.82) INH+RIF+PZA, RR = 0.47 (0.26-0.86), aRR = 0.41 (0.22-0.76) Anergic group (INH vs. placebo): RR = 0.67 (0.42-1.07), aRR = 0.61 (0.32-1.16).	2-Fair	2-Fair	1-Strong	No	Continuation study as follow-up to Whalen et al. Compared three regimens: INH daily x 6 months, INH+RIF x 3 months, and INH+RIF+PZA x 3 months. Duration of efficacy: Noted that for INH x 6 months vs. placebo aRR was 0.11 (0.01-0.93) at 9 months, 0.49 (0.16-1.51) at 12 months, and 0.68 (0.35-1.35) at 24 months
Kabali, C., et al., 2011. <sup>24</sup>	Cohort study nested within a randomized trial	Tanzania Sept. 2001-Jan..2008	588 TST-positive PLHIV in cohort of PLHIV with baseline CD4 >200, 488 completed 6 months of IPT and 70 did not	Completion of IPT associated with increased survival in HIV-infected adults with CD4 counts >200 and positive TST, but protective effect did not extend to incidence of active TB (crude HR 0.7, 0.3-1.5; adjusted HR 0.6, 0.3-1.3).	1-Good	1-Good	2-Medium	No	Authors offered several reasons why reduction in mortality but not in TB incidence: 1. IPT therapy may have been partially effective, but were underestimated in “non-completers” 2. Smear-negative TB tend to be common among patients at advanced stage of HIV 3. Study was statistically underpowered to detect an effect of magnitude seen in this study.
Khawcha roenporn, T., et al., 2012. <sup>25</sup>	Prospective, non-randomized intervention trial	Thailand Jan. 2004-Jan. 2008, 4 years	400 total PLHIV; one group of TST-positive persons who	Incidence of pulmonary TB was significantly higher during the first 6 months in the non-IPT group than in the IPT group (8.60 vs. 0	2-Fair	2-Fair	2-Medium	No	Duration study: Effect noted only during first 6 months of treatment, and waned there-after. Adherence: In IPT group

			received IPT and one group who received no IPT	cases/100 py, p = 0.01), regardless of initial CD4 count (though all cases occurred in patients with CD4<200); however, the 4-year incidence of pulmonary TB was not statistically different for the IPT and non-IPT groups (0.80 vs. 1.76 cases/100,000 person-years).					only 17 participants (9%) had reactive TST, and of these, 14 (82%) completed IPT. Of note: None of the patients that received IPT subsequently developed TB. Adverse events: No significant adverse drug reactions or treatment interruptions reported.
Khongphatthanayothin, M., et al., 2012. <sup>45</sup>	Prospective cohort study	Thailand Jan. 2003-April 2008	4,339 PLHIV; 4,111 (95%) underwent TST, 1157 (28%) were TST positive, 799 (69%) initiated IPT	Outcomes only assessed in 358 (8.5%) of patients with TST test. TB not reported in any patients completing IPT compared to 2 TB cases (2%) amongst TST positive patients who did not complete IPT (p=0.084) and 34 TB cases (2%) amongst patients who were originally TST negative.	3-Poor	2-Fair	2-Medium	No	Baseline CD4 of 304 (405 for TST positive and 267 for TST patients); 23% of patients on ART at the time of TST. Very high loss to follow-up noted. Adherence: Of 799 patients that initiated IPT, 633 (79%) completed 6 months of IPT and 551 (69%) completed 9 months of IPT. Adverse events: 1.2% developed grade 3 or higher liver enzyme elevations at 3 months and 1% at 6 months; all returned to baseline after IPT discontinued.
Lahey, T., et al., 2013 <sup>48</sup>	Case control (Secondary analysis of randomized placebo-controlled vaccine trial)	Tanzania Enrollment from 2001-2005 with follow-up through Jan. 2008; mean follow-up 3.2 years	979 PLHIV (age ≥ 18 years), with CD4 >200 enrolled in placebo arm of TB vaccine trial	Definite TB diagnosed in 52 (5%) and probable TB in 92 (9%). 20 (39%) of those with definite TB completed 180 days of INH, 29 (32%) of those with probable TB completed 180 days of INH, and 216 (24%) of patients without TB completed IPT, p = .072. Likelihood of TB associated with history of	2-Poor	2-Fair	2-Medium	No	All TST-positive participants (and only TST-positive participants) were offered IPT. Adherence: 88% completed 6 months of IPT.

				prior active TB irrespective of TST status of IPT administration.					
Kibret, K.T., et al., 2013. <sup>47</sup>	Case control	Ethiopia Dec. 2011– Feb. 2012	593 PLHIV ≥18 years, (196 cases, 397 controls). Cases were PLHIV with TB after ART initiation; controls were PLHIV without TB after ART initiation	INH significantly reduced the risk of TB infection in PLHIV, (AOR=0.35, 0.13–0.29).	2-Fair	1-Good	2-Medium	No	Note: Cotrimoxazole was also significant in reducing TB incidence (AOR = 0.19, 0.06-0.62).
Mohammed, A., et al., 2007. <sup>18</sup>	Randomized, double-blind, placebo-controlled trial	South Africa Study end date: Dec 2004; Median follow-up 350 days in INH group, 358 days in placebo group and 1130 in INH open-label arm	118 PLHIV: 20 TST-positive (received open-label INH), 98 TST-negative (randomized to INH vs. placebo)	No significant between placebo and INH arms in TB incidence (HR = 1.59, 0.57–4.49; aHR = 2.02, 0.65–5.23), hospitalization (p = 0.999) or decline in lymphocyte count (p = 0.311).	1-Good	1-Good	1-Strong	No	Adherence: Median adherence was 85% in randomized trial arms (similar for INH and placebo) and 92% in open-label INH arm. Adverse events: 3 cases of peripheral neuropathy occurred in the INH arm and none in the placebo arm (p=0.114).
Mwinda, A., et al., 1998. <sup>19</sup>	Randomized, double-blind, controlled trial	Zambia Aug. 1992– July 1994; median follow-up 1.8 years	1,053 PLHIV (age ≥ 15 years), 352 on placebo, 350 on INH, and 350 on RIF+PZA	Prophylaxis led to significant reductions in TB (If probable TB included) INH vs. placebo: cRR = 0.62 (0.38–0.99); RIF+PZA vs. placebo, cRR = 0.58 (0.35–0.95); Either chemoppx vs.	2-Fair	2-Fair	1-Strong	No	TB reduction was noted to be higher in persons with higher lymphocyte count. Adherence: Overall compliance was 74%. Adverse events: 29 subjects (3%) taken off of regimen due to adverse

				placebo: cRR = 0.60 (0.40–0.89); Effect significant in participants with positive TST (RR = 0.27, 0.08–0.87) but not negative TST (RR = 1.06, 0.46–2.46).					events.
Quigley, M.A., et al., 2001. <sup>26</sup>	RCT converted to cohort study	Zambia Aug .1992-July1994; mean follow-up 3 years (up to 1999)	1,053 PLHIV originally enrolled: 112 initial placebo patients placed on INH x 6 months; 44 placebo patients refused or ineligible for IPT	Noted diminishing effect over time, though reduction in TB incidence significant for first 2.5 years: INH vs. placebo, cRR = .52 (0.27–1.00); RIF+PZA vs. placebo, cRR = 0.58 (0.3–1.09); Either chemo ppx vs. placebo cRR = 0.55 (0.32–0.93).	2-Fair	2-Fair	2-Medium	No	Follow-up study to Mwinga et al (See regimen above). Analysis done as ITT using original randomized arms. Duration study: Cumulative benefit was present in first 2.5 years only.
Rangaka, M.X., et al., 2014. <sup>21</sup>	Randomized, placebo-controlled trial	South Africa Jan 2008-Sept 2011; Median follow-up 2.5 years	1,369 ART-treated PLHIV (age ≥ 18 years), 667 on placebo, 662 on INH	Significant reduction in TB incidence in patients who received INH vs. placebo; aHR=0.64 (0.42-0.96) Difference higher among TST negative than TST positive persons: TST negative: aHR = 0.43 (0.21-0.86) TST negative: aHR=0.86 (0.37-2.0)	1-Good	1-Good	1-Strong	No	Median CD4 = 216 Adherence: No difference in median months on study drug or total doses dispensed Adverse events: No difference in discontinuation of study drug due to adverse events
Whalen, C.C., et al., 1997. <sup>20</sup>	Randomized, placebo-controlled trial	Uganda March 1993-April 1995; Designed for 3-yr follow-up, but stopped	2,736 PLHIV randomized based on PPD status	Among TST-positive cohort, TB incidence was significantly decreased in all groups vs. placebo: INH: aRR = 0.32 (0.14–0.76); INH+RIF: aRR = 0.41 (0.19–0.89); INH+RIF+PZA: aRR = 0.43	1-Good	2-Fair	1-Strong	No	Adherence: Of 90% of participants tested for INH urine metabolites (scheduled and random) 75% tested positive. Adverse events: Discontinuation rate of 0.2% for placebo, 0.6% for INH, 2.3% for INH+RIF, and

		due to success of intervention		(0.20–0.92). Among anergic cohort, there was no statistically significant benefit: INH vs. placebo: aRR = 0.75 (0.30–1.89).					5.6% for INH+RIF+PZA
Wilkinson, D., et al., 1998. <sup>30</sup>	Meta-analysis	Multi-country Articles from 1989-1997; follow-up 15-33 months	4 trials with 4,055 PLHIV adults (from U.S., Haiti, Kenya, Uganda) comparing INH to placebo	Found significant reduction in TB incidence with prophylaxis: INH or other ppx vs. placebo, RR = 0.57 (0.41–0.79); For TST positives, RR = 0.32 (0.19–0.51); For TST negatives, RR = 0.82 (0.50–1.36).	2-Fair	2-Fair	1-Strong	No	Adherence: Adherence estimated at 63-75%. Adverse events: Adverse drug reactions higher in treatment group, but not significantly RR = 1.45 (0.98–2.14).
Yirdaw, K.D., et al., 2014. <sup>46</sup>	Retrospective cohort analysis	Ethiopia Sept 2007-Aug 2010; Median follow-up 2 years	5,407 PLHIV 2,131 of whom received IPT	IPT significantly reduced incidence of TB, both alone and in combination with ART: IRT only: aHR = 0.36 (0.19–0.66) IPT before ART: aHR = 0.18 (0.08–0.42) IPT after ART: aHR = 0.08 (0.05–0.15) ART only: aHR = 0.32 (0.24–0.43)	2-Fair	1-Good	2-Medium	No	Analysis compared patients during IPT and ART treatment with same patients prior to initiation of either (reference). Adverse events: IPT completion only documented in 24%
Durovni, B., et al., 2013. <sup>31</sup>	Stepped-wedge, cluster-randomized trial	Brazil Sept. 2005-Aug. 2009	12,816 PLHIV seen in 1 of 29 city health department clinics during study period	The multi-component intervention reduced the incidence of TB after adjustment for potential confounders, HR = 0.87 (0.69–1.10), aHR = 0.73 (0.54–0.99).	2-Fair	2-Fair	2-Medium	No	Intervention in this study had multiple components, including training on TB screening, use of TST, IPT, and TB treatment. Median CD4 at first visit was 426. Adherence: Of patients that tested TST positive, 82% began IPT and 85% of these completed IPT. Adverse events: 22 (1.5%) of participants experienced treatment interruptions

									due to adverse events.
Dowdy, D.W., et al., 2014. <sup>32</sup>	Modeling study	Brazil Modeled 5 year period	Population of 4.1 million;	Providing IPT to 20% of eligible PLHIV per year decreased TB incidence by 15% over the course of 5 years	2-Fair	2-Fair	2-Medium		Follow-on to Durovoni et al estimating impact of intervention if continued expansion at same rate over 5 years.
Grant, A.D., et al., 2005. <sup>49</sup>	Intervention study with randomized incremental recruitment	South Africa 1999-2001; median follow-up 22 months	1,655 HIV-infected males Inclusion criteria: Employee at South African-based mining company	Enrollment into a work-related HIV clinic that provided IPT (among other interventions) reduced incidence of TB: IRR = 0.62 (0.43–0.89). The effect was even greater after adjusting for potential confounders: IRR = 0.54 (0.35–0.83).	2-Fair	2-Fair	2-Medium	No	Median CD4 count was 371 in those who started IPT and 278 in those who hadn't started IPT. Adverse events: 9 patients discontinued IPT because of adverse events
Fitzgerald, D.W., et al., 2000. <sup>13</sup>	Retrospective cohort study	Haiti 1992-1998	1,005 PLHIV who had completed IPT	14 (1.4%) of 1,005 PLHIV developed TB disease after IPT. Median time to TB diagnosis was longer for persons who received IPT for longer time periods at 8 months for 6 patients receiving 6 months of INH, 22 months for 5 patients receiving 12-24 months of INH, and 40 months for 3 patients receiving 24-36 months of INH (p = 0.026).	2-Fair	2-Fair	2-Medium	No	Duration study: Evaluation looked at time to development of TB in patients receiving different courses of INH (6 months-3 years). The median CD4 count at TB diagnosis was 240 cells/mm <sup>3</sup> .
Samandari, T., et al., 2011. <sup>33</sup>	Randomized, double-blind, placebo-controlled	Botswana Nov. 2004-July 2006 with 3 years of	1,995 PLHIV randomly assigned to 6 months INH+30	TB incidence was significantly decreased in patients who received 36 months vs. 6 months of treatment: HR=0.57 (0.33–	1-Good	2-Fair	1-Strong	No	Duration study: Benefit of 6-months of INH decreased approx. 200 days after completion. Adherence: 821/989

	trial	follow-up	months of masked placebo (989) or 6 months INH+30 months of masked INH (1,006)	0.99). When stratified by TST status, only those with positive TST benefited significantly: TST positive HR=0.26 (0.09–0.80); TST negative HR=0.75 (0.38–1.46).					(83%) persons completed INH x 6 months + placebo x 30 months, 834/1,006 (83%) persons completed INH x 36 months. Adverse events: 1% participants in placebo group vs. 1.3% in intervention group had severe adverse events during the 30-month extension period (p = 0.36).
Swaminathan, S., et al., 2012. <sup>34</sup>	Randomized, open-label controlled trial	India March 2001-Oct. 2005	712 PLHIV randomized to INH 300 mg + ethambutol 800 mg for 6 months; or INH 300 mg for 36 months	There was no difference in TB incidence between the INH+ethambutol vs. INH x 36 months groups, irrespective of TST status: Overall aIRR = 1.15 (0.68–1.95) For TST positive, aIRR =1.66 (0.63–4.30) For TST negative, aIRR =1.48 (0.55–3.96).	1-Good	2-Fair	2-Medium	No	Adverse events: 2 patients in the 36 month INH arm had severe peripheral neuropathy.
Gordin, F., et al., 2000. <sup>35</sup>	Randomized, open-label controlled trial	Multi-country Sept. 1991-May 1996; follow-up Oct 1997; mean follow-up 37 months	1,583 HIV-positive persons ≥13 years with positive TST in U.S., Mexico, Haiti and Brazil	No significant difference in the risk of TB between the two regimen, uRR = 0.72 (0.40–1.31), aRR = 0.67 (0.36–1.24)	1-Good	1-Good	2-Medium	No	Median CD4 on entry: 426. No difference noted when stratified by presence or absence of AIDS Adherence: 80% completed RIF+PZA compared to 69% IPT completion (p=<0.001) Adverse events: Study drug discontinued in 10% of RIF+PZA and 6% of INH group (p=0.01), though abnormal LFTs more common in INH group (p=0.02)
Halsey, N.A., et al., 1998. <sup>36</sup>	Randomized clinical trial	Haiti Enrollment April 1990-July	730 TST-positive PLHIV assigned to	Overall, no significant difference noted in TB incidence for RIF+PZA vs. INH, HR=1.3 (0.68–2.70).	2-Fair	2-Fair	1-Strong	No	Adherence: Identical number of patients dropped during the first two months of therapy, but

		1992; follow-up up to 4 years	INHx6 (370) or RIF+PZA x 2 months (380)						adherence was better in the RIF+PZA group compared to INH due to duration of therapy. Adverse events: No serious adverse reactions or discontinuations reported.
Martinson, N.A., et al., 2011. <sup>37</sup>	Randomized clinical trial	South Africa Sept. 2002-June 2005 with a median follow up of 4 years	1,528 TST-positive PLHIV 1,150 randomized to INH+RFP x3 months (329), INH+RIF x 3 months (329), INH x 6 months (328), and continuous INH (up to 6 years) (164)	Incidence rate for RFP & INH 2.0 per 100 person years, RIF & INH 2.0, Continuous INH 1.4, and INH 6 months 1.9. TB incidence rate ratios were 1.05 (0.56-1.97), 1.02 (0.55-1.91), and 0.74 (0.29-1.73) with INH 6 months as the reference group.	2-Fair	2-Fair	1-Strong	No	Adherence: Proportion taking at least 90% of study medications varied by group (96% for INH+RFP, 95% for INH+RIF, 83% for INHx6months, and 89% for continuous INH during follow-up). Adverse events: Rates of serious adverse events also varied by group (8.7 per 100 person-years in the INH+RFP group, 10.6 in the INH+RIF group, 15.4 in the INHx6 months group and 18.4 in the continuous-INH group).
Alaei, K., et al., 2002. <sup>38</sup>	Prospective cohort study	Iran Oct. 1997-April 1998, with 3-year follow-up	246 TST-positive, HIV-infected male prisoners with history of injection drug use	Of 111 patients followed for 3 years receiving IPT (excluding deaths and LTFU), 12 developed TB (rate 3.5/100 person-years).	3-Poor	3-Poor	2-Medium	No	No comparison group. High loss to follow-up. Authors concluded that TB incidence was lower than anticipated TB incidence in absence of IPT.
Bakari, M., et al., 2000. <sup>51</sup>	Nested cohort study	Tanzania 1994-1998 2-year follow-up	143 HIV-infected police officers from cohort of 2,899 officers evaluated for	2/19 developed TB, 1 who defaulted on IPT and developed TB 1 month later and a second 2 years after completing 6 months of INH.	3-Poor	3-Poor	2-Medium	No	Low participation rate. Of 400 eligible HIV-infected officers, 143 (36%) received HIV test results, 87 of these agreed to IPT and only 37 (43%) of these came for their evaluation. Adherence: 19/29 (66%)

			HIV-vaccine trial						patients who started IPT completed the course. Adverse events: No serious side effects noted.
Mosimane et al., 2010. <sup>39</sup>	Cohort study	Botswana Enrollment Nov. 2004- June 2006	1,995 PLHIV (age ≥ 18 years) without acute illness, or history of TB/previous receipt of IPT	During 6 months of follow-up on IPT, 8 (0.40%) developed TB disease. INH resistance was not detected among any TB cases.	2-Fair	2-Fair	2-Medium	No	No comparison group. Adherence: 86% of clients completed the 6-month course of IPT, and 91% of those with pill count data (1375/1511) to ≥80% of their pills. Adverse events: 28 (1.4%) of participants were reported as having serious adverse events, including 1 death from hepatic encephalopathy.
Souza, C.T., et al., 2009. <sup>53</sup>	Non-randomized clinical trial	Brazil Aug. 2002-April 2007; Mean follow-up 2.8 years	138 TST-positive PLHIV	Only 1 person developed TB, equating to a rate of 0.3 per 100 person years.	2-Fair	2-Poor	2-Medium	No	74% of participants were on ART and mean CD4 was 539. Adherence: 88% adherence. Adverse events: Minor side effects noted in 17 (12%) of participants, 7 (5%) required discontinuation.
Bell, J.C., et al., 1999. <sup>40</sup>	Markov model	Uganda	Hypothetical cohort of 100,000 HIV-infected individuals with positive TST	All three regimens reduced TB incidence in PLHIV and secondary infections.	NA	NA	NA	Yes – Level 2 All 3 regimens were less expensive than no preventive therapy. Providing INH x 6 months saves \$24.16 per person, relative to the other regimens.	Modeled comparison of INH x 6 months vs. INH+RIF x 3 months vs. INH+RIF+PZA x 2 months vs. no prophylaxis. Separate estimates made based on: 1) TB cases, 2) TB + social costs, 3) TB + social costs + secondary infections. The cost-effectiveness ratios are sensitive to assumptions about costs, effectiveness of intervention, and number of secondary cases.

Pho, M.T., et al., 2012. <sup>41</sup>	Trial-based cost-effectiveness analysis	India Modeled period of 3 and 10 years and projected life expectancy	Hypothetical cohort of 100 person years (PY)	6 months of INH+ethambutol resulted in an estimated increased life expectancy of 0.8 months (at a cost of \$100). 36 months of INH increased life expectancy by 0.2 months at a cost of \$55.	NA	NA	NA	Yes - Level 2 INH+ethambutol was deemed cost-effective with an ICER of \$1,490/YLS 36 months of INH had an ICER of \$3,120/YLS	Evaluated life expectancy, TB incidence, cost, and ICER in patients receiving INH+ethambutol x 6 months vs. INH x 36 months in India. WHO suggests that an IPT strategy is "cost-effective" when the ICER is <3x the GDP per capita (which is \$980 in India).
Shrestha, R.K., et al., 2006. <sup>54</sup>	Markov cohort simulation	Uganda Jan. 2001-Jan. 2003; 2-year follow-up	7,073 HIV-infected patients		NA	NA	NA	Yes - Level 2 If 6 months of IPT were provided, ICER of providing IPT based on TST result was \$157 per case treated; ICER for providing IPT without using TST was \$482 per case treated	Information modeled effect on TB cases using actual program data (patient outcomes and costs) collected from IPT program that was implemented using the TST strategy at the AIDS Information Center in Uganda. TST sensitivity and specificity were based on published literature.

\* Acronyms:

GDP = gross domestic product  
HR = hazard ratio  
ICER = incremental cost effectiveness ratio  
INH = isoniazid  
IPT = isoniazid preventive therapy  
IRR = incident rate ratio

OR = odds ratio  
PZA = pyrazinamide  
QALYs = quality adjusted life years saved  
RCT = randomized control trial  
RH = relative hazard  
RIF = rifampin

RFP = rifapentine  
RR = relative risk  
YLS = years of life saved  
a = adjusted (e.g. aHR = adjusted hazard ratio)  
c = crude (e.g. cRR = crude rate ratio)  
u = unadjusted (e.g. uOR = unadjusted odds ratio)

