Thibela TB research programme under way at TauTona and Great Noligwa

About 3,300 AngloGold Ashanti employees at the TauTona and Great Noligwa mines have consented to participate in the largest TB research programme undertaken in the South African mining industry. (Two other AngloGold Ashanti mines are acting as controls in the programme.)

The Thibela TB programme, which was launched towards the end of 2005, is being funded by the South African Mine Health and Safety Council and the international Consortium to Respond Effectively to the AIDS/TB Epidemic (CREATE). The programme is being conducted and overseen by South African medical research organisation, Aurum Institute for Health Research, a member of CREATE and formerly AngloGold Ashanti Health's internal research initiative.

The overall aim of the programme is to establish whether administering community-wide TB preventive therapy in addition to standard TB control is more effective than the standard TB control alone. The programme includes targeted TB preventive therapy to individuals at high risk of developing TB, as is the case with underground gold miners working in dusty environments. If successful, such a programme would radically reduce TB transmission between people, which would lead to fewer TB cases occurring later, thus resulting in improved control of the disease. Specifically, the aim of the programme is to demonstrate that community-wide preventive therapy, used in addition to standard TB control measures, is effective in reducing both the incidence of TB and its consequences, and that it can improve the control of TB in high-risk environments, particularly where there is a high prevalence of HIV/AIDS and silicosis.

The Thibela TB research programme is being undertaken in collaboration with several South African gold mining companies, and labour unions and associations. The study has the support of various government departments, including labour, health and minerals and energy.

The process of enrolling consenting individuals onto TB preventive therapy began in July 2006 and may take as long as 24 months to complete. The enrolment process is currently under way at TauTona and Great Noligwa and at the end of 2006 3,300 individuals had consented to participate in the programme. In all, around 65,000 miners will be involved in the study. The enrolment process is expected to be completed by June 2008. The programme is progressing well but as the study could take five years to complete, it is too soon to report any preliminary results. Currently, funding is available for four and a half years.

The Thibela TB programme is part of a global research programme to find a solution, in the face of an escalating rate of infection, to reducing the incidence of TB, particularly as TB control in the South African gold mining industry is proving increasingly difficult, despite the implementation of control programmes exceeding World Health Organization standards. This is largely attributable to silicosis and the escalating HIV/AIDS epidemic, which compounds the incidence of TB. Similar studies are being conducted by CREATE in high-risk communities in Zambia and Brazil.

According to Professor Gavin Churchyard, CEO of the Aurum Institute for Health Research and principal investigator for the study, "If successful, this study will demonstrate that it is possible to control TB in settings where HIV is prevalent and will serve as a model to control TB in other settings with high rates of TB transmission and HIV."

TB has a high social and economic cost, both for the individual concerned and the industry as a whole. The onset of the AIDS epidemic in South Africa coincided with a four-fold increase in the rates of TB, which has serious implications both for the country and the gold mining industry. Historically, because of the increased risk of TB in silica-exposed gold miners, TB is considered an occupational disease in South Africa. Improved employee health would lead to an improved quality of life, improved productivity and much reduced healthcare costs.