

Media/Publication	The Agami Duniya		
Date	24 th November 2025	Language	English
Headline	IIT Bhubaneswar and ILS Transfer Novel TB Vaccine Technology to TechInvention: Facilitated by NRDC		
Link	https://agamiduniya.in/	?p=2590	



Bhubaneswar, 24th November 2025:(A.D.News) Indian Institute of Technology (IIT) Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, along with the National Research Development Corporation (NRDC), have signed a Quadripartite License Agreement (QLA) with TechInvention Lifecare Limited for the technology transfer and future commercialization of a novel TB vaccine candidate titled "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis." Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as reported by the WHO. Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs). However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults. To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof. Ashis Biswas of Indian Institute of Technology (IIT) Bhubaneswar and Dr. Sunil Kumar Raghav of Institute of Life Sciences (ILS), Bhubaneswar. This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine. In view of its significant public health potential, National Research Development Corporation (NRDC) proactively identified and evaluated this technology and facilitated the licensing process to ensure its advancement. The technology exchange was held at ILS Bhubaneswar in the presence of several senior dignitaries including Dr. Debasis Dash, Director, ILS; Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar; Prof. Dinakar Pasla, Dean (Sponsored Research & Industrial Consultancy), IIT Bhubaneswar; Dr. B. K. Sahu, Senior Regional Manager & Head Outreach Offices, NRDC; Syed S. Ahmed, Director & CEO, TechInvention



Lifecare Limited; Dr. Sunil Kumar Raghav, Scientist F, ILS Bhubaneswar; Dr. Ashis Biswas, Professor, School of Basic Sciences, IIT Bhubaneswar, along with other distinguished guests.

The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution. With strong expertise in vaccine development, regulatory readiness, and global health innovation, TechInvention brings deep technical strength and established manufacturing capabilities.



Media/Publication	The Statesman			
Date	24 th November 2025	Language	English	
Headline				
	IIT-Bhubaneswar, ILS transfer novel TB vaccine technology to			
	TechInvention			
Link				
	https://www.thestatesman.com/india/iit-bhubaneswar-ils-transfer-			
	novel-tb-vaccine-techno	ology-to-techinvention-15	03516838.html	



Indian Institute of Technology (IIT)-Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, along with the National Research Development Corporation (NRDC), have signed a Quadripartite License Agreement (QLA) with TechInvention Lifecare Limited for the technology transfer and future commercialization of a novel TB vaccine candidate titled "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis."

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as reported by the WHO. Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs). However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

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& Industrial Consultancy), IIT Bhubaneswar; Dr. B. K. Sahu, Senior Regional Manager & Head – Outreach Offices, NRDC; Syed S. Ahmed, Director & CEO, TechInvention Lifecare Limited; Dr. Sunil Kumar Raghav, Scientist F, ILS Bhubaneswar; Dr. Ashis Biswas, Professor, School of Basic Sciences, IIT Bhubaneswar, along with other distinguished guests.

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This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation, and eventual commercialization. It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health.



Media/Publication	The Week			
Date	24 th November, 2025	Language	English	
Headline	IIT Bhubaneswar transfer novel TB vaccine technology to TechInvention			
Link	https://www.theweek.in vaccine-tech.html	/wire-updates/national/20	025/11/24/ces26-od-	

Bhubaneswar, Nov 24 (PTI) The Bhubaneswar-based Indian Institute of Technology (IIT), the Institute of Life Sciences (ILS) along with the National Research Development Corporation (NRDC), have joined hands for the technology transfer and future commercialisation of a novel TB vaccine, officials said.

The three organisations signed a quadripartite license agreement (QLA) with TechInvention Lifecare Ltd here on Monday for the technology transfer and future commercialisation of 'HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis'. The HSP Subunit Vaccine candidate was jointly developed by the premier institutions ILS and IIT Bhubaneswar, while NRDC identified and evaluated the technology and facilitated the licensing process to ensure its advancement, an official said.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution, he said. Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as per the WHO report.

Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs), the IIT said in a statement on Monday.

However, the world continues to rely on the Bacillus Calmette Guerin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults, it said.

To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Ashis Biswas of IIT Bhubaneswar and Sunil Kumar Raghav of ILS, Bhubaneswar.

The IIT claimed that the vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine. This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation, and eventual commercialisation, as per the statement. It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health, the institute said.



Media/Publication	The prameya		
Date	24 th November, 2024	Language	English
Headline	IIT Bhubaneswar, IL TechInvention	S transfer novel TB	vaccine technology to
Link	https://www.prameyane vaccine-technology-to-te	ews.com/iit-bhubaneswar echinvention	-ils-transfer-novel-tb-



Bhubaneswar, Nov 24: Indian Institute of Technology (IIT) Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, along with the National Research Development Corporation (NRDC), have signed a Quadripartite License Agreement (QLA) with TechInvention Lifecare Limited for the technology transfer and future commercialization of a novel TB vaccine candidate titled "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis."

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23million lives in 2024alone, as reported by the WHO. Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs). However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

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This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine. In view of its significant public health potential, National Research Development Corporation (NRDC) proactively identified and evaluated this technology and facilitated the licensing process to ensure its advancement.

The technology exchange was held at ILS Bhubaneswar in the presence of several senior dignitaries including Dr. Debasis Dash, Director, ILS; Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar; Prof. Dinakar Pasla, Dean (Sponsored Research & Industrial Consultancy), IIT Bhubaneswar; Dr. B. K. Sahu, Senior Regional Manager & Head – Outreach Offices, NRDC; Syed S. Ahmed, Director & CEO,



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The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution. With strong expertise in vaccine development, regulatory readiness, and global health innovation, TechInvention brings deep technical strength and established manufacturing capabilities.

This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation, and eventual commercialization. It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health.



Media/Publication	The Pragativadi			
Date	24 th November, 2025	Language	English	
Headline	IIT Bhubaneswar and ILS Transfer Novel TB Vaccine Technology to TechInvention			
Link	https://pragativadi.com vaccine-technology-to-te	/iit-bhubaneswar-and-ils- echinvention/	-transfer-novel-tb-	



IIT Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, achieved a major milestone in public health innovation by transferring novel TB vaccine technology to TechInvention Lifecare Limited.

The National Research Development Corporation (NRDC) facilitated the Quadripartite License Agreement (QLA), signed on November 24, 2025, to enable future commercialisation of the vaccine candidate titled "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis."

Tuberculosis remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024, according to the WHO. Ending the TB epidemic by 2030 is a global priority under the United Nations Sustainable Development Goals (SDGs). However, the century-old Bacillus Calmette Guérin (BCG) vaccine offers limited protection, mainly to infants, and fails to prevent pulmonary TB in adolescents and adults.

To address this gap, Prof. Ashis Biswas of IIT Bhubaneswar and Dr Sunil Kumar Raghav of ILS led collaborative research to develop the HSP Subunit Vaccine. The candidate is designed to trigger strong



humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

The technology exchange ceremony at ILS Bhubaneswar witnessed the presence of senior dignitaries, including Dr Debasis Dash, Director, ILS; Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar; Prof. Dinakar Pasla, Dean (Sponsored Research & Industrial Consultancy), IIT Bhubaneswar; Dr B. K. Sahu of NRDC; Syed S. Ahmed, CEO of TechInvention; and other distinguished guests.

TechInvention Lifecare Limited will play a crucial role in translating this indigenous vaccine into a viable public health solution. With expertise in vaccine development, regulatory readiness, and manufacturing, TechInvention ensures efficient advancement from research to commercialisation. This partnership strengthens India's mission to eliminate tuberculosis and highlights the transformative potential of indigenous, research-driven healthcare innovations.



Media/Publication	The Odisha T.V			
Date	24 th November, 2025	Language	English	
Headline	IIT-Bhubaneswar, ILS innovate next-gen tuberculosis vaccine HSP 16.3 DC4			
Link	https://odishatv.in/odish tuberculosis-vaccine-hs	na/iit-bhubaneswar-ils-in p-163-dc4-10808921	novate-next-gen-	

Technology transfer ceremony being held in Bhubaneswar Photograph: (OTV



A major scientific breakthrough has emerged from Bhubaneswar as a new tuberculosis (TB)-preventive vaccine is set to provide stronger protection than existing options. The <u>Institute of Life Sciences (ILS)</u>, under BRIC, has developed a novel vaccine named HSP 16.3 DC4, offering the potential to significantly boost immunity against TB.



Media/Publication	The ETV Bharat					
Date	24 th November, 2025 Language Odia					
Headline						
	ILS's 'HSP 16.3DC4' vaccine to provide protection against tuberculosis					
	ILS has developed a vaccine against tuberculosis. BCG is the only approved					
	vaccine for tuberculosis till now.					
Link						
	•	https://www.etvbharat.com/or/state/ils-invents-hsp-16-dot-3dc4-a-				
	protective-shield-agains	t-tuberculosis-odisha-nev	vs-ors25112404718			



ଭୁବନେଶ୍ବର: ଇନ୍ଷ୍ଟିଚ୍ୟୁଟ୍ ଅଫ୍ ଲାଇଫ୍ ସାଇନ୍ସ୍- ILS ଉଦ୍ଭାବନ କଲା ଯକ୍ଷ୍ମା (ଟିବି) ପ୍ରତିରୋଧକ ଟିକା। ଟିବି ବା ଯକ୍ଷ୍ମାରୁ ସୁରକ୍ଷା ପାଇଁ ଏକ ଟିକା, ଯାହା ପରବର୍ତ୍ତୀ ଜେନେରେସନ୍ ଭ୍ୟାକ୍ସିନ୍ ଭାବେ ବେଶ୍ ଫଳପ୍ରଦ ହେବ। BRIC- ଇନ୍ଷ୍ଟିଚ୍ୟୁଟ୍ ଅଫ୍ ଲାଇଫ୍ ସାଇନ୍ସ ବୈଜ୍ଞାନିକମାନେ ଉଦ୍ଭାବନ କରିଥିବା ଏହି ଭ୍ୟାକ୍ସିନ୍ ହେଉଛି, 'HSP 16.3DC4' । ଏଥିରେ ଆଇଆଇଟି ଭୁବନେଶ୍ୱର ପକ୍ଷରୁ ସମୟ ପ୍ରକାର ବୈଷୟିକ ସହଭାଗିତା ରହିଛି। ଏହି ଭ୍ୟାକ୍ସିନ୍ର ଫର୍ମୁଲା ଓ ଟେକ୍ଟୋଲୋଜି, ଟିକା ପ୍ରୟୁତକାରୀ ଅନୁଷ୍ଠାନକୁ ହୟାନ୍ତର କରାଯାଇଛି। ଏହି ଟେକ୍ଟୋଲୋଜିକୁ ନେଇ ଆଗ୍ରହୀ ଔଷଧ ପ୍ରୟୁତକାରୀ କମ୍ପାନି 'HSP 16.3DC4' ଭ୍ୟାକ୍ସିନ୍ ବା ଟିକା ପ୍ରୟୁତ କରିବେ **ଟିକା ଗବେଷଣାପାଇ12 ବର୍ଷ ସମୟ ଲାଗିଥିଲା:-**

ଗବେଷଣା ସମୟରେ ଏହି 'HSP 16.3DC4' ଭ୍ୟାକ୍ସିନ୍ ମୂଷାଙ୍କଠାରେ ସଫଳତାର ସହ କାର୍ଯ୍ୟ କରିଛି। ଏହା ଆଗକୁ ଯକ୍ଷ୍ମା (ଟିବି) ପ୍ରତିରୋଧକ ଦିଗରେ ଫଳପ୍ରଦ ହେବ। ଦେଶ ତଥା ରାଜ୍ୟକୁ ଟିବି ମୁକ୍ତ କରିବା ଦିଗରେ ସୁରକ୍ଷା କବଚ ଭଳି କାର୍ଯ୍ୟ କରିବ 'HSP 16.3DC4' I ଏହି ଟିକାର ପରୀକ୍ଷା 12 ବର୍ଷ ଧରି କରାଯାଇଥିଲା। ଯାହା କେବଳ ମୂଷା ଉପରେ ପରୀକ୍ଷଣ ପାଇଁ 5ରୁ 7 ବର୍ଷ ସମୟ ଲାଗିଥିଲା। ଏହା ପୂର୍ବରୁ 2 ବର୍ଷ ଧରି ଟିକା ଉପରେ ପରୀକ୍ଷା କରାଯାଇଥିଲା। ଏପରି ଦେଖିବାକୁ ଗଲେ ଏହି ଟିକା ପାଇଁ ସର୍ବ ମୋଟ୍ ଆକାରରେ 12 ବର୍ଷ ସମୟ ଲାଗିଥିଲା।



ଯକ୍ଷ୍ମା ବିରୋଧରେ ସୁରକ୍ଷା କବଚ:-

ବର୍ତମାନ ବାସିଲସ୍ କାଲମେଟ୍-ଗୁଏରିନ୍- BCG ହେଉଛି, ଏପର୍ଯ୍ୟନ୍ତ ଯକ୍ଷ୍ମା ପାଇଁ ଏକ ମାତ୍ର ଅନୁମୋଦିତ ଟୀକା। ତେବେ ତା ତୁଳନାରେ ଏହି 'HSP 16.3DC4' ଟିକା ବହୁତ ପ୍ରଭାବୀ ଅଟେ। ଏହି ଟିକା କୋଷିକାର ଟି-ସେଲ୍ ମେମୋରୀ ଓ ବି-ସେଲ୍ ମେମୋରୀକୁ ନିରନ୍ତର ସକ୍ରିୟ ରଖିଥାଏ। ଯାହା ଫଳରେ ନିରନ୍ତର ଜୀବାଣୁ ମାରିବା ଦିଗରେ ସଂଗ୍ରାମ କରିଥାଏ। ଏହା ଯୁବପୀଢ଼ିଙ୍କ କ୍ଷେତ୍ରରେ ଭଲ କାର୍ଯ୍ୟ କରିବ। ଯାହା ଲୋକଙ୍କୁ ସ୍ଥାୟୀ ଯକ୍ଷ୍ମା ପ୍ରତିରୋଧକ କ୍ଷମତା ଓ ପ୍ରତିରକ୍ଷା ଦେଇପାରିବ। ଏହା ଜୀବାଣୁ ବିରୋଧରେ ଦୀର୍ଘ ସମୟ ଧରି ରୋଗ ପ୍ରତିରୋଧକ ଶକ୍ତି ବୃଦ୍ଧି କରିବ। ଏହା କୋଷୀୟ ଏବଂ ହ୍ୟୁମୋରାଲ୍ ପ୍ରତିକ୍ରିୟା ଉଭୟକୁ ବୃଦ୍ଧି କରି ପଲ୍ମୋନାରୀ ଜୀବାଣୁ ବିରୋଧରେ ସଂଗ୍ରାମ କରିବ।

2025 ସୁଧା ଚିବି ମୁକ୍ତ ପ୍ରୟାସ:-

୨୦୨୫ ସୁଦ୍ଧା ସମାଜକୁ ଟିବି ମୁକ୍ତ କରିବା ଲଗି କେନ୍ଦ୍ର ଓ ରାଜ୍ୟ ସରକାର ଅଭିଯାନ ଜାରି ରଖିଛନ୍ତି। ଟିବି ରୋଗୀ ଚିହ୍ନଟ ଓ ଚିକିହା ଦିଗରେ ଜୋରଦାର ଉଦ୍ୟମ ଜାରି ରଖିଛି ରାଜ୍ୟ ସ୍ୱାସ୍ଥ୍ୟ ବିଭାଗର ଟିବି ସେଲ୍। ରାଜ୍ୟରେ ବ୍ୟାପକ ପଦକ୍ଷେପ ସତ୍ତ୍ୱେ ମଧ୍ୟ ବଢୁଛି ଯକ୍ଷ୍ମା ରୋଗୀଙ୍କ ସଂଖ୍ୟା। ମାଲନ୍ୟୁଟ୍ରିସନ ଯୋଗୁ ରାଜ୍ୟରେ ବ୍ୟାପୁଛି ଯକ୍ଷ୍ମା ରୋଗ ବା ଟିବି।

ରାଜ୍ୟରେ ଟିବି ବା ଯକ୍ଷ୍ମା ରୋଗୀଙ୍କ ସଂଖ୍ୟା କେତେ:-

ରାଜ୍ୟରେ ଗତବର୍ଷ ୬୨ ହଜାର ଯକ୍ଷ୍ମା ରୋଗୀ ଚିହ୍ନଟ କରାଯାଇଥିଲା। ଚଳିତ ବର୍ଷ ୧୦୦ ଦିନର ସ୍ୱତନ୍ତ୍ର ଟିବି କ୍ୟାମ୍ପେନରେ ରାଜ୍ୟରେ ନୂଆ ୧୨ ହଜାର ୨୪୫ ଯକ୍ଷ୍ମା ରୋଗୀ ଚିହ୍ନଟ ହୋଇଛନ୍ତି। ତେବେ ଯକ୍ଷ୍ମା ମୃତ୍ୟୁ ହାର ରାଜ୍ୟରେ ୬ ପ୍ରତିଶତରୁ କମ୍ ହୋଇ ଏବେ ୪ ପ୍ରତିଶତରେ ପହଞ୍ଚିଛି।

ଯକ୍ଷ୍ମା ରୋଗ ପାଇଁ ବିଭାଗ ପକ୍ଷରୁ କ'ଣ ରହିଛି ସୁବିଧା:-

ଯକ୍ଷ୍ମା ରୋଗ ପାଇଁ ଫୁଡ୍ ବାସ୍କେଟ ବ୍ୟବସ୍ଥା ସହ ୬ ମାସିଆ ଇଞ୍ଜେନ୍ସିଭ ଥେରାପି ଦିଆଯାଉଛି। ୨୦୨୫ ଡିସେମ୍ବର ସୁଦ୍ଧା ଓଡ଼ିଶାକୁ ଟିବି ମୁକ୍ତ କରିବା ପାଇଁ ଟାର୍ଗେଟ ଦିଆଯାଇଛି। କିନ୍ତୁ ବର୍ଷକୁ ଏତେ ସଂଖ୍ୟକ ରୋଗୀ ବାହାରୁଥିବାରୁ ଏହି ଟାର୍ଗେଟ୍ କିଭଳି ହାସଲ ହୋଇପାରିବ, ତାକୁ ନେଇ ପ୍ରଶ୍ନ ଉଠିଛି। ଏହାକୁ ଦୃଷ୍ଟିରେ ରଖି କାର୍ଯ୍ୟ କରାଯାଉଛି ବୋଲି ସ୍ୱାସ୍ଥ୍ୟ ବିଭାଗର ଟିବି ସେଲ୍ ପକ୍ଷରୁ କୁହାଯାଇଛି।

ଟିବି ସଂକ୍ରମିତଙ୍କ ପାଇଁ କ'ଣ ରହିଛି ସରକାରୀ ସୁବିଧା:-

ରାଜ୍ୟରେ ଟିବି ସଂକ୍ରାମିତଙ୍କ ପାଇଁ ସରକାରଙ୍କ ପକ୍ଷରୁ ରହିଛି ଅନେକ ସୁବିଧା। ସମୟ ସ୍ୱାସ୍ଥ୍ୟକେନ୍ଦ୍ର ଓ ସମୟ ହେଲୁ ଓ ଖ୍ବେଲନେସ ସେଣ୍ଟରରେ ଚିହ୍ନଟ ହୋଇଥିବା ଯକ୍ଷ୍ମା ରୋଗୀଙ୍କୁ ବିନା ମୂଲ୍ୟରେ ରୋଗ ନିରୂପଣ କରାଯାଉଛି। ଏହାସହିତ ଉନ୍ନତମାନର ଔଷଧ ମଧ୍ୟ ଦିଆଯାଉଛି। ମାଇକ୍ରୋସ୍କୋପି ଏବଂ ଏକ୍ସରେ ସହିତ ମୋଲେକୂଲାର ପଦ୍ଧତି ହ୍ବାରା କଫ ପରୀକ୍ଷା ସୁବିଧାକୁ ଧୀରେ ଧୀରେ ସମୟ ବ୍ଲକକୁ ସଂପ୍ରସାରିତ କରାଯାଉଛି। 'ଏନପିୱାଇ' ଅଧୀନରେ ଚିହ୍ନଟ ହୋଇ ଚିକିହିତ ହେଉଥିବା ପ୍ରତ୍ୟେକ ଯକ୍ଷ୍ମା ରୋଗୀଙ୍କୁ ମାସିକ ୫ ଶହ ଟଙ୍କା ଉତ୍ତା, ଚିକିହା ବାବଦରେ ଦିଆଯାଉଛି। ଚିକିହା ଶେଷ ହେବା ପର୍ଯ୍ୟନ୍ତ ରୋଗୀଙ୍କ ବ୍ୟାଙ୍କ ଖାତା ଜରିଆରେ ଏହି ରାଶି ପ୍ରଦାନ କରାଯାଉଛି।



ରାଜ୍ୟରେ ଟିବି ସଂକ୍ରମିତଙ୍କ ସ୍ଥିତି କିଭଳି:-

ସ୍ୱାସ୍ଥ୍ୟ ବିଭାଗର ତଥ୍ୟ ଅନୁସାରେ, ୨୦୧୫ ଠାରୁ ବାର୍ଷିକ ଯକ୍ଷ୍ମା ରୋଗ ହାର ୧୮ ପ୍ରତିଶତ ହ୍ରାସ ପାଇଛି। ୨୦୨୩ ସୁଦ୍ଧା ମୃତ୍ୟୁ ହାର ୨୨ ପ୍ରତିଶତ ହ୍ରାସ ପାଇଛି। ପ୍ରତି ଏକ ଲକ୍ଷ ଜନସଂଖ୍ୟାରେ ଯକ୍ଷ୍ନା ରୋଗୀଙ୍କ ସଂଖ୍ୟା ୨୦୧୫ ମସିହାରେ ୨୩୭ରୁ ୨୦୨୩ ମସିହାରେ ୧୯୫କୁ ହ୍ରାସ ପାଇଛି। ସେହିପରି ଭାବେ ଏକ ଲକ୍ଷ ଜନସଂଖ୍ୟାରେ ୨୦୧୫ ମସିହାରେ ୨୮ ଜଣଙ୍କ ଟିବିରେ ମୃତ୍ୟୁ ଘଟିଥିବା ବେଳେ ୨୦୨୩ ମସିହାରେ ୨୨ ଜଣଙ୍କ ମୃତ୍ୟୁ ଘଟିଛି।

ରାଜ୍ୟରେ କେତେ ଅଛନ୍ତି ଟିବି ରୋଗୀ:-

ଟିବି ପାଇଁ ବର୍ତ୍ତମାନ ସମୟରେ ରାଜ୍ୟର ୧ ୯ଟି ଜିଲ୍ଲାକୁ ଅଧିକ ମାଡ୍ରାରେ ଫୋକସ କରାଯାଉଛି । ବଲାଙ୍ଗର, ବରଗଡ଼, ଭଦ୍ରକ, ବୌଦ୍ଧ, କଟକ, ଦେବଗଡ଼, ଗଞ୍ଜାମ, ଜଗତସିଂହପୁର, କଳାହାଣ୍ଡି, କନ୍ଧମାଳ, କେନ୍ଦ୍ରାପଡ଼ା, କୋରାପୁଟ, ମାଲକାନଗିରି, ମୟୂରଭଞ୍ଜ, ପୁରୀ, ସୋନପୁର, ରାୟଗଡ଼ା ଓ ସ୍ୱନ୍ଦରଗଡ଼ ଆଦି ଜିଲ୍ଲା ଅଧିକ ଫୋକସରେ ରହିଛି।

୨୦୨୪ ସୁଦ୍ଧା ରାଜ୍ୟର ଏସମଞ ଜିଲ୍ଲାରେ ଚିହ୍ନଟ ହୋଇଥିବା ଯକ୍ଷ୍ମା ରୋଗୀ-

ବଲାଙ୍ଗିର ଜିଲ୍ଲାରେ ୧୨୧୧ ଟିବି ରୋଗୀ ଚିହ୍ନଟ ହୋଇଥିବା ବେଳେ ବରଗଡ଼ ଜିଲ୍ଲାରେ ୯୪୪ ଜଣ, ଭଦ୍ରକ ଜିଲ୍ଲାରେ ୬୮୪, ବୌଦ୍ଧ ଜିଲ୍ଲାରେ ୧୭୬, କଟକ ଜିଲ୍ଲାରେ ୧୬୬୧, ଦେବଗଡ଼ ଜିଲ୍ଲାରେ ୧୯୯, ଗଞ୍ଜାମ ଜିଲ୍ଲାରେ ୪୧୭୨, ଜଗଡସିଂହପୁର ଜିଲ୍ଲାରେ ୨୯୮, କଳାହାଣ୍ଡି ଜିଲ୍ଲାରେ ୧୧୦୦, କନ୍ଧମାଳ ଜିଲ୍ଲାରେ ୯୬୮, କେନ୍ଦ୍ରାପଡ଼ା ଜିକ୍ଲାରେ ୬୧୨, କେନ୍ଦୁଝର ଜିଲ୍ଲାରେ ୨୩୩୦, କୋରାପୁଟ ଜିଲ୍ଲାରେ ୧୪୬୮, ମାଲକାନଗିରି ଜିଲ୍ଲାରେ ୫୯୫, ମୟୂରଭଞ୍ଜ ଜିଲ୍ଲାରେ ୩୯୦୬, ପୁରୀ ଜିଲ୍ଲାରେ ୭୭୮, ସୋନପୁର ଜିଲ୍ଲାରେ ୨୪୭, ରାୟଗଡ଼ା ଜିଲ୍ଲାରେ ୧୯୬୭, ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲାରେ ୧୯୪ ଟିବି ରୋଗୀ ଚିନ୍ଦୁଟ କରାଯାଇଛି। ତେବେ ରାଜ୍ୟର ମୋଟ ୧୯ଟି ଜିଲ୍ଲାରେ ବିଶେଷ ଭାବେ ପାଖାପାଖ୍ ୨୪ ହଜାର ୪୩୦ ଜଣ ଟିବି ରୋଗୀ ରହିଥିବା, ସ୍ୱାୟ୍ୟ ବିଭାଗ ପକ୍ଷର ସ୍ୱଚନା ଦିଆଯାଇଛି।



Media/Publication	The Orissa Post		
Date	24 th November, 2025	Language	English
Headline	IIT Bhubaneswar, ILS sign pact to commercialise new TB vaccine		
Link	https://www.orissapost.com/iit-bhubaneswar-ils-sign-pact-to- commercialise-new-tb-vaccine/amp/		



Bhubaneswar: The Bhubaneswar-based Indian Institute of Technology (IIT), the Institute of Life Sciences (ILS), along with the National Research Development Corporation (NRDC), have joined hands for the technology transfer and future commercialisation of a novel TB vaccine, officials said.

The three organisations signed a quadripartite license agreement (QLA) with TechInvention Lifecare Ltd, Monday, for the technology transfer and future commercialisation of 'HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis'.

The HSP Subunit Vaccine candidate was jointly developed by the premier institutions ILS and IIT Bhubaneswar, while NRDC identified and evaluated the technology and facilitated the licensing process to ensure its advancement, an official said.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution, he said.

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as per the WHO report.

Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs), the IIT said in a statement Monday.

However, the world continues to rely on the Bacillus Calmette Guerin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults, it said.

To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Ashis Biswas of IIT Bhubaneswar and Sunil Kumar Raghav of ILS, Bhubaneswar.



The IIT claimed that the vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation, and eventual commercialisation, as per the statement.

It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health, the institute said.



Media/Publication	The Telegraph Online				
Date	24 th November, 2025 Language English				
Headline	IIT Bhubaneswar and enhance BCG protectio	ILS create new HSP	subunit TB vaccine to		
Link		ndia.com/amp/india/iit-bl ccine-to-fight-tuberculosi			

Indian Institute of Technology Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar have jointly developed a vaccine to combat tuberculosis (TB).

The HSP subunit vaccine candidate represents a significant step forward in India's fight against *Mycobacterium tuberculosis*. "This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges," a release from IIT said.

TB remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, according to the WHO. Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals.

Currently, the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, offers limited protection, mainly to infants, and is largely ineffective in preventing pulmonary TB in adolescents and adults.

"To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof Ashis Biswas of IIT Bhubaneswar and Dr Sunil Kumar Raghav of ILS Bhubaneswar," the release said.

For commercial use, IIT Bhubaneswar and ILS, along with the National Research Development Corporation (NDRC), have signed a Quadripartite License Agreement with TechInvention Lifecare Limited to transfer technology and develop the vaccine candidate, titled "HSP Subunit Vaccine in Adjuvant (DDA) Against *Mycobacterium* tuberculosis."

The vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing BCG's protective efficacy. NRDC facilitated the licensing process to ensure its advancement.



Media/Publication	The Press Trust of India			
Date	25 th November, 2025	Language	English	
Headline	IIT Bhubaneswar, t TechInvention	ransfer novel TB v	accine technology to	
Link		m/editor-detail/iit-bhuba o-techinvention/3127430	neswartransfer-novel-	

BHUBANESWAR: (Nov 24) The Bhubaneswar-based Indian Institute of Technology (IIT), the Institute of Life Sciences (ILS) along with the National Research Development Corporation (NRDC), have joined hands for the technology transfer and future commercialisation of a novel TB vaccine, officials said.

The three organisations signed a quadripartite license agreement (QLA) with TechInvention Lifecare Ltd here on Monday for the technology transfer and future commercialisation of 'HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis'.

The HSP Subunit Vaccine candidate was jointly developed by the premier institutions ILS and IIT Bhubaneswar, while NRDC identified and evaluated the technology and facilitated the licensing process to ensure its advancement, an official said.



Media/Publication	The Indian News			
Date	25 th November, 2025	Language	English	
Headline				
	Odisha: IIT Bhubaneswar signs agreement for Novel TB vaccine technology			
Link				
	https://indianews.com.a novel-tb-vaccine-techno	u/odisha-iit-bhubaneswa ology/	r-signs-agreement-for-	



Bhubaneswar, Nov 24 (IANS) Taking a major stride toward advancing indigenous TB vaccine research, IIT Bhubaneswar, the Institute of Life Sciences (ILS), and the National Research Development Corporation (NRDC) have formalised a Quadripartite License Agreement with TechInvention Lifecare Limited.

The agreement paves the way for technology transfer and potential commercialisation of a promising new vaccine candidate, "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis."

The agreement aims to advance the vaccine from laboratory research to product development and eventual commercial deployment.

According to the World Health Organization, TB claimed 1.23 million lives in 2024, making it one of the world's deadliest infectious diseases.

"However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

"To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof. Ashis Biswas of IIT, Bhubaneswar and Dr Sunil Kumar Raghav of ILS, Bhubaneswar," reads a press note issued by the ILS.

This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.



In view of its significant public health potential, the NRDC proactively identified and evaluated this technology and facilitated the licensing process to ensure its advancement.

"The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges," the ILS further added.



Media/Publication	The HINDU		
Date	25 th November, 2025	Language	English
Headline	New TB vaccine for adolescents, adults ready for commercialisation		
Link	https://www.thehindu.com/sci-tech/health/new-tb-vaccine-for-adolescents-adults-ready-for-commercialisation/article70317633.ece/amp/		

Indian Institute of Technology (IIT) Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, under Department of Biotechnology, along with the National Research Development Corporation (NRDC), have signed a quadripartite license agreement (QLA) with TechInvention Lifecare Limited for the technology transfer and future commercialisation of the novel TB vaccine.

According to ILS, tuberculosis remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as reported by the WHO.

"Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs). However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults," it said.

To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof Ashis Biswas of IIT, Bhubaneswar and Sunil Kumar Raghav of ILS, Bhubaneswar, the institute said.

"This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine. In view of its significant public health potential, NRDC proactively identified and evaluated this technology and facilitated the licensing process to ensure its advancement," said the national level institutes involved in development of the vaccine.

The technology exchange was held at ILS Bhubaneswar in the presence of several senior dignitaries including Debasis Dash, ILS Director, Shreepad Karmalkar, IIT Director, B. K. Sahu, Senior Regional Manager and Head (Outreach Offices) of NRDC and Syed S. Ahmed, Director and CEO of TechInvention Lifecare Limited.

"The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges," a statement issued by institutes said.

It pointed out that TechInvention, the licensed industry partner, was committed to translating this indigenous vaccine technology into a viable public health solution.

The joint statement said this partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation, and eventual commercialisation.



Media/Publication	The Times of India		
Date	25 th November, 2025	Language	English
Headline	TB vaccine's tech transferred to private firm		
Link	_	https://timesofindia.indiatimes.com/city/bhubaneswar/tb-vaccines-tech- transferred-to-private-firm/amp_articleshow/125547025.cms	

Bhubaneswar: The Institute of Life Sciences (ILS) Bhubaneswar and IIT Bhubaneswar on Monday transferred the technology of a potential vaccine candidate developed for tuberculosis (TB) to a firm. The company will conduct further clinical trials and commercialize the vaccine.

The existing BCG vaccine provides only limited protection and mainly to infants. It is largely ineffective in preventing pulmonary TB in adolescents and adults. However, this vaccine will help adolescents and adults, apart from enhancing the efficacy of the existing BCG vaccine.

Both institutions, along with the National Research Development Corporation (NRDC), signed a quadripartite licence agreement with TechInvention Lifecare Limited for technology transfer and future commercialisation of a TB vaccine candidate titled 'HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis.'

Ashis Biswas, professor, school of basic sciences, IIT Bhubaneswar, said he started working on vaccine candidates in 2012. "After analysing several variants, I found one which became a potential vaccine candidate later. I met Sunil Kumar Raghav, ILS scientist, in 2020 and started collaborating with the ILS Bhubaneswar team to conduct a pre-clinical study of the vaccine candidate," Biswas said.

Raghav said they completed animal trials as part of the pre-clinical study. "We saw the vaccine candidate is very effective. It reduces bacterial load and increases immunity cells for long-term protection of lungs," Raghav said. TNN



Media/Publication	The New Indian Express			
Date	25 th November, 2025 Language English			
Headline	IIT-BBS & ILS hand new TB vaccine tech to TechInvention		to TechInvention	
Link	https://www.newindiane 5/iit-bbs-ils-hand-new-th			

BHUBANESWAR: Indian Institute of Technology (IIT) Bhubaneswar and Institute of Life Sciences (ILS) along with National Research Development Corporation (NRDC) on Monday signed a quadripartite licence agreement (QLA) with TechInvention Lifecare Limited for the technology transfer and commercialisation of a novel TB vaccine against Mycobacterium tuberculosis.

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone. The next-generation HSP subunit vaccine has been developed through a collaborative research led by Prof Ashis Biswas of IIT-BBS and Dr Sunil Kumar Raghav of ILS-BBS.

This vaccine candidate has been designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

In view of its significant public health potential, NRDC evaluated this technology and facilitated the licencing process to ensure its commercialisation.

Prof Biswas said this is a protein subunit vaccine developed as part of a joint collaboration. "The protein was first developed at the IIT lab and then underwent preclinical trials on mice models at ILS, which tested the efficacy levels. Until now BCG was the only vaccine against TB. The new vaccine if administered after BCG, will act as a booster dose with higher efficiency," he said.

As per the agreement, TechInvention, the licensed industry partner, will help translate this indigenous vaccine technology into a viable public health solution. With strong expertise in vaccine development, regulatory readiness, and global health innovation, TechInvention is expected to complete phase-I and II clinical trials within next four to five years.

"This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation and eventual commercialisation. It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health," said ILS director Debasis Dash.



Media/Publication	The Janta se Rishta		
Date	25 th November, 2025	Language	Hindi
Headline	ILS and IIT-Bhubaneswar collaborate on new TB vaccine		
Link			
	https://jantaserishta.com/amp/local/odisha/ils-iit-bhubaneswar-		
	collaborate-on-new-tub	erculosis-vaccine-439977	4



भुवनेश्वर : एक बड़ी कामयाबी में, इंस्टिट्यूट ऑफ़ लाइफ साइंसेज़ (ILS), भुवनेश्वर ने ट्यूबरक्लोसिस (TB) के लिए अगली पीढ़ी की सबयूनिट वैक्सीन बनाई है। IIT-भुवनेश्वर के साथ मिलकर बनाई गई 'Hsp16.3C4' नाम की वैक्सीन सफल प्री-क्लिनिकल ट्रायल के बाद टेक्नोलॉजी ट्रांसफर के लिए तैयार है।

TB दुनिया की सबसे जानलेवा संक्रामक बीमारियों में से एक है, जिसने अकेले पिछले साल 12 लाख से ज़्यादा जानें लीं। अभी बैसिलस कैलमेट ग्यूरिन (BCG) वैक्सीन ही एकमात्र लाइसेंस्ड इम्यूनाइज़ेशन स्ट्रेटेजी है जिसका इस्तेमाल सभी देशों में TB की रोकथाम के लिए किया जा रहा है। ILS के सीनियर साइंटिस्ट डॉ. सुनील कुमार राघव और IIT- भुवनेश्वर के प्रोफ़ेसर आशीष बिस्वास की अगुवाई में मिलकर की गई रिसर्च से HSP सबयूनिट वैक्सीन बनी, जिसे भारत में TB के खिलाफ़ पहली वैक्सीन माना जाता है।

हालांकि BCG बच्चों को थोड़ी सुरक्षा देता है, लेकिन यह कम असर, अलग-अलग सुरक्षा नतीजों और टिकाऊ मेमोरी रिस्पॉन्स की कमी के कारण पूरी सुरक्षा देने में नाकाम रहा है। यह किशोरों और बड़ों में पत्मोनरी TB, जो बीमारी का सबसे ज़्यादा फैलने वाला रूप है, को भी रोकने में नाकाम रहता है।

इस कमी को पूरा करने और सभी उम्र के लोगों के लिए वैक्सीन बनाने पर रिसर्च दशकों से फोकस रही है। चूहों के मॉडल पर किए गए प्री-क्लिनिकल ट्रायल सफल रहे हैं क्योंकि वैक्सीनेशन के बाद ब्लड ग्लूकोज, रीनल फंक्शनल मार्कर (यूरिया और क्रिएटिनिन) और लिपिड प्रोफाइल कंपोनेंट (कोलेस्ट्रॉल और ट्राइग्लिसराइड्स) जैसे नॉर्मल बायोकेमिकल पैरामीटर में कोई टॉक्सिसिटी सिग्नल नहीं देखा गया।



Media/Publication	The Sambad			
Date	25 th November, 2025 Language English			
Headline	IIT Bhubaneswar signs agreement for TB vaccine		TB vaccine	
Link	https://sambadenglish.com agreement-for-tb-vaccine		neswar-signs-	



Bhubaneswar: Taking a major stride toward advancing indigenous <u>TB</u> vaccine research, <u>IIT Bhubaneswar</u>, the Institute of Life Sciences (ILS), and the National Research Development Corporation (NRDC) have formalised a Quadripartite License Agreement with TechInvention Lifecare Limited.

The agreement paves the way for technology transfer and potential commercialisation of a promising new vaccine candidate, "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium <u>tuberculosis</u>."

The agreement aims to advance the vaccine from laboratory research to product development and eventual commercial deployment.

Also read: <u>NaMo Semiconductor Lab at IIT Bhubaneswar to boost India's chip design ecosystem:</u> MeitY.

According to the World <u>health</u> Organisation, TB claimed 1.23 million lives in 2024, making it one of the world's deadliest infectious diseases.

"However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

"To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof. Ashis Biswas of IIT, Bhubaneswar and Dr Sunil Kumar Raghav of ILS, Bhubaneswar," reads a press note issued by the ILS.



About the vaccine

This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

In view of its significant public health potential, the NRDC proactively identified and evaluated this technology and facilitated the licensing process to ensure its advancement.

"The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges," the ILS further added.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution.



Media/Publication	The wral			
Date	25 th November, 2025 Language English			
Headline	India's Indigenous TB Vaccine: IIT Bhubaneswar Unleashes AI and Biotech for a New Era of Disease Defense			
Link	https://markets.financialcontent.com/wral/article/tokenring-2025-11-indias-indigenous-tb-vaccine-iit-bhubaneswar-unleashes-ai-and-biotech-for-a-new-era-of-disease-defense			

In a monumental leap for global public health, the Indian Institute of Technology (IIT) Bhubaneswar, in collaboration with the Institute of Life Sciences (ILS) Bhubaneswar, has spearheaded the development of India's first indigenous, next-generation subunit vaccine against tuberculosis (TB). This groundbreaking initiative, culminating in the 'Hsp16.3C4' vaccine, has successfully completed pre-clinical trials, showcasing robust immune responses without adverse effects. This advancement marks a critical turning point in the relentless global battle against TB, a disease that continues to claim millions of lives annually, and highlights the transformative power of integrating advanced biotechnology with cutting-edge artificial intelligence.

The immediate significance of this breakthrough cannot be overstated. With the existing Bacillus Calmette Guérin (BCG) vaccine offering limited protection, particularly against pulmonary TB in adults and adolescents, the Hsp16.3C4 vaccine emerges as a beacon of hope. Its unique design, which does not interfere with the BCG vaccine's biology, positions it as a potential standalone immunization or a crucial booster, promising enhanced and broader protection. The recent technology transfer to TechInvention Lifecare Limited through a quadripartite license agreement underscores the commitment to bringing this vital innovation from the lab to the global population, bolstering India's self-reliance in public health and contributing significantly to the worldwide effort to eradicate TB by 2030.



Media/Publication	The Devdiscourse News Desk			The Devdiscourse News Desk	
Date	24 th November, 2025 Language English				
Headline	Revolutionizing T	B Immunization: A Novel	Vaccine Journey		
Link	https://www.devdiscourse.com/article/health/3708348-revolution tb-immunization-a-novel-vaccine-journey?amp		8348-revolutionizing-		



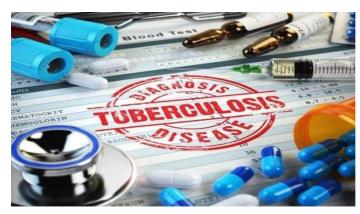
The Indian Institute of Technology (IIT) in Bhubaneswar, along with the Institute of Life Sciences (ILS) and the National Research Development Corporation (NRDC), has formed a significant partnership to advance a new tuberculosis (TB) vaccine. This collaboration looks to bring a groundbreaking alternative to the century-old Bacillus Calmette Guerin (BCG) vaccine.

The initiative took a formal step forward as the three institutions signed a quadripartite license agreement with TechInvention Lifecare Ltd. The focus is on the technology transfer and future commercialization of the 'HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis.'

Developed by ILS and IIT Bhubaneswar, and facilitated by NRDC, the vaccine aims to provide stronger and broader protection than the outdated BCG, addressing a dire global health need. TechInvention Lifecare will be pivotal in transforming this research into a tangible public health solution.



Media/Publication	The jagaran			
Date	25 th November, 2025 Language Hindi			
Headline		ILS-IIT Bhubaneswar achieves major breakthrough: Develops new vaccine for TB control, HSP16.3 DC4		
Link		https://www.jagran.com/odisha/bhubaneshwar-ilsiit-bhubaneswar-develops-new-tb-vaccine-hsp-163-dc4-40051393.html		



जागरण संवाददाता, भुवनेश्वर। टीबी रोगियों के लिए एक अच्छी खबर आई है। ओडिशा स्थित इंस्टिट्यूट ऑफ लाइफ साइंसेज (आईएलएस) और आईआईटी भुवनेश्वर के वैज्ञानिकों ने टीबी नियंत्रण के लिए एचएसपी 16.3 डीसी4 नामक नया टीका विकसित किया है। इस टीके के फॉर्मूले को मुंबई स्थित टेक इन्वेंशन लाइफकेयर कंपनी को हस्तांतरित किया गया है।

चूहों पर इसका परीक्षण सफल रहा है और अब आगे मानव परीक्षण शुरू होगा। बताया जा रहा है कि यह टीका बहुत जल्द बाजार में उपलब्ध हो सकता है।

जानकारी के मुताबिक, संक्रामक रोग टीबी पिछले चार हजार वर्षों से दुनिया में मौजूद है। विश्वभर में हर साल लाखों लोग इससे संक्रमित होते हैं और पिछले वर्ष ही 12 लाख से अधिक लोगों की जान गई। विश्व स्वास्थ्य संगठन ने 2030 तक दुनिया को टीबी मुक्त करने का लक्ष्य रखा है।

हालांकि, वर्तमान में टीबी से बचाव के लिए सौ साल पहले विकसित बीसीजी टीका लगाया जाता है, जो बच्चों को सीमित सुरक्षा देता है, लेकिन किशोरों और वयस्कों के लिए यह प्रभावी नहीं है। ऐसे समय में टीबी नियंत्रण के लिए नए टीके की आवश्यकता लंबे समय से महसूस की जा रही थी।

ऐसे में अब आईआईटी भुवनेश्वर के प्रोफेसर आशीष विश्वास और आईएलएस भुवनेश्वर के डॉ. सुनील कुमार राघव ने यह नया टीका विकसित किया है, जो बीसीजी टीके की तुलना में अधिक प्रभावशाली माना जा रहा है।



राष्ट्रीय अनुसंधान विकास निगम (एनआरडीसी) ने इसके तकनीकी मूल्यांकन के बाद लाइसेंसिंग के लिए कंपनी चयन में मदद की है। टीका फॉर्मूला हस्तांतरण के लिए आईएलएस में एक विशेष कार्यक्रम आयोजित किया गया। आईएलएस, आईआईटी, एनआरडीसी और टेक इन्वेंशन लाइफकेयर के बीच एक एमओयू हस्ताक्षरित हुआ है।

आईएलएस की ओर से बताया गया कि बीसीजी टीके के साथ सब-यूनिट के रूप में इस नए टीके को देने पर इसका प्रभाव और बढ़ जाएगा।

मानव परीक्षण प्रयोगशालाओं में संभव नहीं है, इसलिए इसके लिए टीका निर्माता कंपनियों की मदद आवश्यक है। इस कार्यक्रम में आईएलएस के निदेशक डॉ. देवाशीष दास, आईआईटी भुवनेश्वर के निदेशक प्रोफेसर श्रीपद कर्मालकर, डीन (आर एण्ड आइसी) प्रोफेसर दिनकर पासला, एनआरडीसी के विरष्ठ क्षेत्रीय महाप्रबंधक और प्रमुख (आउटरीच ऑिफस) डॉ. बी.के. साहू, टेक इन्वेंशन लाइफकेयर के निदेशक व सीईओ सैयद एस. अहमद, आईएलएस के वैज्ञानिक डॉ. सुनील राघव और आईआईटी भुवनेश्वर के स्कूल ऑफ बेसिक साइंस के प्रोफेसर डॉ. आशिष विश्वास सिहत कई गणमान्य व्यक्ति उपस्थित रहे।

डब्ल्यूएचओ की रिपोर्ट के अनुसार, टीबी दुनिया की सबसे घातक संक्रामक बीमारियों में से एक है, जो अकेले 2024 में 1.23 मिलियन लोगों की जान ले लेती है। संयुक्त राष्ट्र सतत विकास लक्ष्यों (एसडीजी) के तहत 2030 तक टीबी महामारी को समाप्त करना एक प्रमुख वैश्विक स्वास्थ्य प्राथमिकता है।

हालांकि, दुनिया में एक सदी पहले विकसित बैसिलस कैल्मेट गुएरिन (बीसीजी) वैक्सीन पर भरोसा करना जारी रखा है, जो मुख्य रूप से शिशुओं को केवल सीमित सुरक्षा प्रदान करती है और किशोरों और वयस्कों में फुफ्फुसीय टीबी को रोकने में काफी हद तक अप्रभावी है।

इस महत्वपूर्ण अधूरी आवश्यकता को पूरा करने के लिए, भारतीय प्रौद्योगिकी संस्थान (आईआईटी) भुवनेश्वर के प्रोफेसर आशीष विश्वास और इंस्टीट्यूट ऑफ लाइफ साइंसेज (आईएलएस), भुवनेश्वर के डॉ. सुनील कुमार राघव के नेतृत्व में सहयोगात्मक अनुसंधान के माध्यम से अगली पीढ़ी की एचएसपी सब-यूनिट वैक्सीन विकसित की गई है। इस नई वैक्सीन को मौजूदा बीसीजी वैक्सीन की सुरक्षात्मक प्रभावकारिता को बढ़ाते हुए कोशिका-मध्यस्थ प्रतिरक्षा प्रतिक्रियाओं को ट्रिगर करने के लिए डिजाइन किया गया है।



Media/Publication	The OMMCOM News			
Date	25 th November, 2025 Language English			
Headline	IIT Bhubaneswar, ILS And NRDC Sign Pact For Indigenous TB Vaccine Development		· Indigenous TB	
Link	https://ommcomnews.com/odisha-news/iit-bhubaneswar-ils-and-sign-pact-for-indigenous-tb-vaccine-development/			



Bhubaneswar: Taking a major stride toward advancing indigenous TB vaccine research, IIT Bhubaneswar, the Institute of Life Sciences (ILS), and the National Research Development Corporation (NRDC) have formalised a Quadripartite License Agreement with TechInvention Lifecare Limited.

The agreement paves the way for technology transfer and potential commercialisation of a promising new vaccine candidate, "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis."

The agreement aims to advance the vaccine from laboratory research to product development and eventual commercial deployment.

According to the World Health Organization, TB claimed 1.23 million lives in 2024, making it one of the world's deadliest infectious diseases.

"However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

"To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof. Ashis Biswas of IIT, Bhubaneswar and Dr Sunil Kumar Raghav of ILS, Bhubaneswar," reads a press note issued by the ILS.

This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.



In view of its significant public health potential, the NRDC proactively identified and evaluated this technology and facilitated the licensing process to ensure its advancement.

"The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges," the ILS further added.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution.



Media/Publication	The Odisha Bytes			
Date	25 th November, 2025 Language English			
Headline	IIT-Bhubaneswar & ILS Partner With TechInvention For Roll Out C TB Vaccine			
Link	https://odishabytes.com/iit-bhubaneswar-ils-partner-with- techinvention-for-roll-out-of-tb-vaccine/amp/		ner-with-	



Bhubaneswar: Indian Institute of Technology (IIT) Bhubaneswar and Institute of Life Sciences (ILS) along with National Research Development Corporation (NRDC) have entered into a quadripartite licence agreement (QLA) with TechInvention Lifecare Limited to transfer and commercialise an innovative next-generation tuberculosis (TB) vaccine targeting Mycobacterium tuberculosis.

According to the World Health Organisation, TB claimed 1.23 million lives in 2024, making it one of the world's deadliest infectious diseases.

"However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

"To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by

Prof. Ashis Biswas of IIT, Bhubaneswar and Dr Sunil Kumar Raghav of ILS, Bhubaneswar," read a press note issued by the ILS.

This vaccine is designed to induce robust humoral and cellular immune responses while significantly improving the protective effectiveness of the existing BCG vaccine. This is a protein subunit vaccine developed as part of a joint collaboration. "The HSP Subunit Vaccine candidate, jointly developed by the premier institutions ILS and IIT Bhubaneswar, represents a significant advancement in India's efforts to



combat Mycobacterium tuberculosis. This collaboration reflects the robustness of India's research ecosystem and its commitment to addressing critical public health challenges," the ILS further added.

Under the agreement, TechInvention Lifecare Limited, the industry licensee, will take forward the indigenous technology and translate it into a viable public health solution. It is expected to complete phase-I and II clinical trials within the next four to five years, leveraging its expertise in vaccine development, regulatory compliance, and global health solutions.

"This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation and eventual commercialisation. It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health," said ILS director Debasis Dash.



Media/Publication	The South first			
Date	25 th November, 2025 Language English			
Headline	India's new tuberculosis vad launch	ccine for adolescents, ad	ults set for market	
Link	https://thesouthfirst.com/health/indias-new-tuberculosis-vaccinadolescents-adults-set-for-market-launch/		culosis-vaccine-for-	



India's first tuberculosis vaccine for adolescents and adults – HSP Subunit Vaccine (DDA) – developed by IIT Bhubaneswar and ILS Bhubaneswar, is ready for commercialisation. A quadripartite licence agreement has been signed with TechInvention Lifecare to produce this BCG-boosting vaccine, addressing the critical gap in pulmonary TB protection.

A new tuberculosis (TB) vaccine for adolescents and adults, the HSP Subunit Vaccine in Adjuvant (DDA), is now ready for commercialisation.

Existing vaccines, such as the Bacillus Calmette Guérin (BCG), offer only limited protection, mainly for infants, and are largely ineffective in preventing pulmonary TB in older age groups. The new vaccine aims to fill this critical gap.

The vaccine was developed through collaborative research by IIT Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, under the Department of Biotechnology.



Media/Publication	The New Indian Express				
Date	25 th November, 2025 Language English				
Headline	IIT-BBS & ILS hand new TB vaccine tech to TechInvention		to TechInvention		
Link	https://www.newindianexpress.com/states/odisha/2025/Nov/25/iiils-hand-new-tb-vaccine-tech-to-techinvention		n/2025/Nov/25/iit-bbs-		



BHUBANESWAR: Indian Institute of Technology (IIT) Bhubaneswar and Institute of Life Sciences (ILS) along with National Research Development Corporation (NRDC) on Monday signed a quadripartite licence agreement (QLA) with TechInvention Lifecare Limited for the technology transfer and commercialisation of a novel TB vaccine against Mycobacterium tuberculosis.

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone. The next-generation HSP subunit vaccine has been developed through a collaborative research led by Prof Ashis Biswas of IIT-BBS and Dr Sunil Kumar Raghav of ILS-BBS.

This vaccine candidate has been designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

In view of its significant public health potential, NRDC evaluated this technology and facilitated the licencing process to ensure its commercialisation.

Prof Biswas said this is a protein subunit vaccine developed as part of a joint collaboration. "The protein was first developed at the IIT lab and then underwent preclinical trials on mice models at ILS, which tested the efficacy levels. Until now BCG was the only vaccine against TB. The new vaccine if administered after BCG, will act as a booster dose with higher efficiency," he said.



As per the agreement, TechInvention, the licensed industry partner, will help translate this indigenous vaccine technology into a viable public health solution. With strong expertise in vaccine development, regulatory readiness, and global health innovation, TechInvention is expected to complete phase-I and II clinical trials within next four to five years.

"This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation and eventual commercialisation. It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health," said ILS director Debasis Dash.



Media/Publication	The Prameya		
Date	25 th November, 2025	Language	Odia
Headline	MoU for exchange of Technology Solutions		

ଆଇଏଲ୍ଏସ୍ ପ୍ରତିରୋଧକ ଏଚ୍ଏସ୍ପି ୧୬.୩ଡିସି ୪ ଟିକା

ଟେକ୍ନୋଲୋଜି ସୂତ୍ର ବିନିମୟ ପାଇଁ ଏମ୍ଓୟୁ

නම් මාගරාස පුරුම් ප්රම්ණ (ජාස්ථාසම් දි තුරුදෙන්න අත සැම්මුණ නිසු සාසාර තුරුදෙන්න අත සාස්ථාදේ අත සාසාර තුරුදෙන්න අත සාස්ථාදේ අත සාසාර තුරුදෙන්න සාසාර අත සාසාර සාසාර අත්ත අත සාසාර අත්ත තුරුදෙන්න සාසාගත් කුරුදෙන්න ලියදීම ප්රතිශ්‍ය සාසාගත් කුරුදෙන්න අත්තිශ්‍ය සාසාගත් සාසාර අත්තිශ්‍ය සාසාර සාසාර කුරුදෙන්න සිතු ප්රතිශ්‍ය සාසාර කුරුදෙන්න සිතු ප්රතිශ්‍ය සාසාර අතුම් සාස්ථාදේ ප්රතිශ්‍ය සාසාර අතුම් සාස්ථාදේ ප්රතිශ්‍ය සාස්ථාදේ සිත් අතුම් සාස්ථාදේ ප්රතිශ්‍ය සාස්ථාදේ සිත් අතුම් සාස්ථාදේ ප්රතිශ්‍ය සාස්ථාදේ සිත්



ଆଲଟରିଚ୍ ରାର୍ଯ୍ୟାଳୟ ମୁଖ୍ୟ ଜଲ୍ପର ବି କେ ସାହୁ ଟେଲ୍ଭରନରେନସନ୍ ରାଲଫରେୟର ଲିମିଟେଡର ନର୍ଦ୍ଦେଶକ ଏବଂ ସିଲଣ ପଣଦ ଏସ୍. ଅହଞ୍ଚଦ, ଆଲଏଲ,ଏସ୍ ଲୁକନେଶ୍ୱର ବୈଞ୍ଚାନିକ ଜଲ୍ପନ୍ ସ୍ଥାନୀ କ୍ରମାର ରାଗଦ, ଆଇଆଲଟି ଲୁକନେଶ୍ୱର ଜୁଲ ଅଫ, ବେଶିକ୍, ପାଲଟେସସ୍ ପ୍ରଫେସବ ଜୁଲ ଅଫ, ବେଶିକ୍, ପାଲଟେସସ୍ ପ୍ରଫେସବ ଜଳର ଅଶିଷ୍ଟ ବିଶାସ ପମଖ ଜଣ୍ଡିନ ଅନେ

ଏହି ଚେକ୍ନୋଲୋଳିକୁ ନେଇ ଆଗ୍ରହୀ ଔଷଃ ପଞ୍ଜୁବଜାରୀ କମ୍ପାନି କ୍ୟାନ୍ତସିନ୍ଦ ବା ଦିବା ପଞ୍ଜୁ କରିବ । ଏହି ଫର୍ମୁଲା ମାନକ ପରୀକ୍ଷଶରେ ସଫ ହେଲେ ଟିକା ପଞ୍ଜୁତ କରାଯିବ । ଏହା ବଳାରଣ

୯୬.୩ଜିପି୪ ବହୃତ ପୁରାବୀ । ଏହି ତିରା ବେଶରିଖର ତି-ବେଲ୍ ମେମୋରୀ ଓ ବି-ବେଲ୍ ମେମୋରୀକ୍ ଟିରଡର ସହିୟ ରହିଥାଏ । ସାହାଫକରେ ନିରଡନ ହାବାକୁ ମାରିବା ତିରରେ ସଂଗ୍ରମ କରିଥାଏ । ଏହା ପୁରସିଡିକ ଷେତ୍ରର ଅଧ୍ୱର ପ୍ରତିଶୋଧକ ଖମନା ଓ ପ୍ରତିଶଣ ଦେଇପାରିବା ଏହା ନାରଖୁ ବିରୋଧରେ ତାର୍ଗ ଏମଣ ଧରି ରେଖ ସହା ନାରଖୁ ବିରୋଧରେ ତାର୍ଗ ଏମଣ ଧରି ରେଖ ସହା ନାରଖୁ ବିରୋଧରେ ତାର୍ଗ ଏମଣ ବିଶେଷ୍ଟ



Media/Publication	The Pioneer		
Date	25 th November, 2025	Language	English
Headline	IIT, ILS provide novel TB vaccine tech		

IIT, ILS provide novel TB vaccine tech



RAJEEV RATHAN B Bhubaneswar

he Indian Institute of Technology Bhubaneswar and the Institute of Life Sciences (ILS), Bhubaneswar, along with the National Research Development Corporation (NRDC), have signed a Quadripartite Licence Agreement (QLA) with the TechInvention Lifecare Limited for technology transfer and future commercialisation of a novel TB vaccine candidate titled "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis".

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as reported by the WHO. Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs). However, the world continues to rely on the Bacillus Calmette Guérin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults.

To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Prof Ashis Biswas of IIT Bhubaneswar and Dr Sunil Kumar Raghav of ILS Bhubaneswar. This vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

TechInvention Lifecare Limited will play a key role in translating this indigenous vaccine technology into a viable public health solution.



Media/Publication	The Statesman				
Date	25 th November, 2025 Language English				
Headline	IIT-Bhubaneswar & ILS TechInvention	IIT-Bhubaneswar & ILS transfer Novel TB Vaccine Technology to TechInvention			

IIT-Bhubaneswar&ILS transfer Novel TB Vaccine Technology to TechInvention

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Media/Publication	The Political and Business Daily			
Date	25 th November, 2025 Language English			
Headline	IIT Bhubaneswar, ILS transfer novel TB vaccine technology to Techinvention			

IIT Bhubaneswar, ILS transfer novel TB vaccine technology to TechInvention

PBD BUREAU/PTI

BHUBANESWAR, NOV 24

THE Bhubaneswar-based Indian Institute of Technology (IIT), the Institute of Life Sciences (ILS) along with the National Research Development Corporation (NRDC), have joined hands for the technology transfer and future commercialisation of a novel TB vaccine, officials said.

The three organisations signed a quadripartite license agreement (QLA) with TechInvention Lifecare Ltd here on Monday for the technology transfer and future commercialisation of 'HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis'.

The HSP Subunit Vaccine candidate was jointly developed by the premier institu-



tions ILS and IIT Bhubaneswar, while NRDC identified and evaluated the technology and facilitated the licensing process to ensure its advancement, an official said.

TechInvention Lifecare Limited, the licensed industry partner, will play a key role in translating this indigenous vaccine technology into a viable public health solution, he said.

Tuberculosis (TB) remains one of the world's deadliest infectious diseases, claiming 1.23 million lives in 2024 alone, as per the WHO report. Ending the TB epidemic by 2030 is a key global health priority under the United Nations Sustainable Development Goals (SDGs), the IIT said in a statement on Monday.

However, the world continues to rely on the Bacillus Calmette Guerin (BCG) vaccine, developed over a century ago, which provides only limited protection mainly to infants and is largely ineffective in preventing pulmonary TB in adolescents and adults, it said.

To address this critical unmet need, a next-generation HSP Subunit Vaccine has been developed through collaborative research led by Ashis Biswas of IIT Bhubaneswar and Sunil Kumar Raghav of ILS, Bhubaneswar.

The IIT claimed that the vaccine candidate is designed to trigger strong humoral and cell-mediated immune responses while enhancing the protective efficacy of the existing BCG vaccine.

This partnership ensures that the jointly developed vaccine candidate advances efficiently from research to product development, validation, and eventual commercialisation, as per the statement.

It strengthens India's mission to eliminate tuberculosis and underscores the transformative potential of indigenous, research-driven healthcare innovations for national and global health, the institute said.



Media/Publication	The Orissa Post		
Date	25 th November, 2025	Language	English
Headline	City institutes transfer no	vel TB vaccine tech.	

City institutes transfer novel TB vaccine tech

INN & AGENCIES

Bhubanes war, Nov 24: The Bhubanes war, based Irdian Institute of Technology (ITT), the Institute of Life Sciences (ILS) along with the National Research Development Corporation (NRDC), have joined hands for the technology transfer and future commercialisation of a novel TB vaccine, officials said.

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Media/Publication	The Sambad		
Date	25 th November, 2025	Language	Odia
Headline	New vaccines for tubercul	osis to be launched	

ଆଇଏଲ୍ଏସ୍, ଆଇଆଇଟି ନଥ୍ୟା ପାଇଁ ଆସିବ ନୂଆ ଟିକା ଭ୍ବନେଶ୍ୱରକୁ ସଫଳତା

ଦୁରତେଥିର, 9%/୧୧ (ସମିସ): ସମ୍ମା ରୋଗୀଙ୍ଗ ପାଇଁ ସଭ ଖବର: ଓଡ଼ିଖାରେ ଅବସ୍ଥାପିତ ନୀତ ଜିଞ୍ଚାନ ପ୍ରତିଷ୍ଠାନ(ଅଲ-ଏକ୍-ଏମ) ଓ ଆଇଆସଟି ଦୁରତେଥିରେ ବୈଷ୍କାଳିକମାନେ ସମ୍ମା ନିୟନ୍ତ୍ରଣ ପାଇଁ ଏବ୍-ଏମସି ୧୬.ମନ୍ତିମଧ୍ୟ ନିବା ବିକରିତ କରିଛନ୍ତି। ଏହି ବିକାର ଫର୍ମୁରାକୁ ଆନି ମୁମ୍ବାସସିତ ବେଦ୍ୱରତ୍ୱରେଣ୍ଡମ୍ବ କରାଫ୍ରକସାନ ଫସାକୁ ହମ୍ମାବନ କରାଯାଇଥି। ମୁମ୍ବାଙ୍କ ଓଡ଼ାରେ ଏହି ଜିଲାର ପ୍ରଯୋଗ ସଫଳ ବୋଇଥିବା ବେଳେ ଅଗକୁ ମାନକ ପରୀଥଣ ଅରମ୍ଭ ବେଳା ଶୁକ୍ରଣୀପ୍ର ଏହା

ଙ୍କଳାନଳ ରୋକ ଅସ୍ଥା ବିଶ୍ୱରେ ବିଶତ ୪ଉନାର ବର୍ଷ ଧରି ରହିଛି। ବିଶ୍ୱବଧାସୀ ଲୟଧିକ ଲୋକ ପ୍ରତିବର୍ଷ ଏଥିରେ ଙ୍କଳ୍ପନିତ ହେଉଥିବା

ବେଳେ ସବେର୍ଷ ୧୨ଲଥରୁ ଅଧିକ ଲୋକଳା ଜୀବନ ଯାଉଛି। ବିଶ୍ୱ ବ୍ୱାହା ଫରଠନ(ହ) ପଥରୁ ୨୦୩୦ ବୃହା ଯନ୍ତ୍ରମୁକ୍ତ କରିବା ପାଇଁ



ଲଫା ରହିଛି। ଯସ୍ପାଠାରୁ ପୁରଣା ପାଇଁ ଏବେ ବି ଶବେ ବର୍ଷ ପୂର୍ବକୁ ଉଲାବନ ବେଇଥିବା ବିଗିତି ବିଳା ଦିଆଯାଉଛି। ଶିଶୁଙ୍କୁ ଏହା ସାମିତ ସୁରଣ।

ଦେଉଥିବା ତେଲେ ଲିଖେର ନିମ୍ନା ବୟସ୍କଳା ପାଇଁ ଫଳପୁଦ ହେଉନହିଁ। ଏଉଳି ପରିଷ୍ଟିତିରେ ଯମ୍ମା ନିୟନ୍ତା ପାଇଁ ପ୍ରଥା ନିଷର ଅବକ୍ରଳତା ଚହିଥିବା ଅଭ୍ୟାଧନ୍ତି ବୁବଳକୃତର ପ୍ରଫେମର ଅନ୍ତର୍ଥ ବିହାନ ଉପତ ଏହି ନୂଆ ନିଷା ବିହାନ ଜଣଣତ ଏହି ନୂଆ ନିଷା ବିହାନ ଜଣଣତ ଏହି ନହା ନିଷର ନିଷର ନିଷର ପଳପୁଦ ନେଖିୟ କବେଷଣ ଜିବାଶ ନିଷୀମ (ବ୍ୟଥନେନିମ) ପଞ୍ଚଳ୍ଲ ଏହି ବୈଷର ଆକ୍ରେମିଶନର ମମୀୟ କବାଯିବା ପରେ ଲାଇନେନ୍ ପାଇଁ ଫଣ୍ଡା ବୟନ କରିକାରେ ସହାୟତା ପ୍ରଜାନ କରାଯାଇଛି ନିହାର ପାନୁଣା ହଥ୍ୟର ପାଇଁ ଆଳ ବଳ୍ଦ ବହ୍ନରେ ଏହ ପୁଦକ୍ଷ କାର୍ଯ୍ୟନ୍ତିର ଅନ୍ତର୍ଥିତ ହୋଇଥିଲା । — ୭



Media/Publication	The Samaya		
Date	25 th November, 2025	Language	Odia
Headline	Tubercolosis will be erad	icated from the world: ILS	





Media/Publication	The Sakala		
Date	25 th November, 2025	Language	odia
Headline	ILS's tuberculosis vaccino	e research successful	

ଆଇଏଲ୍ଏସ୍ର ଯକ୍ଷ୍ମା ଟିକା ଗବେଷଣା ସଫଳ



ଜୁବନେଶ୍ୱର, ୨୪/୧୧ (ସମିସ): ଯକ୍ଷା ନ୍ୟାସନାଲ ରିସର୍ଚ୍ଚ ଡେଉଲପମେଣ୍ଡ କର୍ପୋରେସନ୍ ନିରାକରଣରେ ଦିଗରେ ଏକ ଅଭୂତପୂର୍ବ ପକ୍ଷରୁ ଟେକ୍-ଇନଭେନସନ୍ ଲାଇଫ କେୟାର

ପହଞ୍ଚାଇବା ପାଇଁ

ଏମ୍ଓୟୁ ସାକ୍ଷରିତ

यପଳତା ମିଳିଛି । ଭୁବନେଶ୍ୱର ଆଇଆଇଟି ଏବଂ ଜୀବ ବିଜ୍ଞାନ ପ୍ରତିଷ୍ଠାନ (ଆଇଏଲଏସ), ରୁବନେଶ୍ୱର ମିଳିତ ଭାବେ ପ୍ରଭାବଶାଳୀ ଯକ୍ଷା

ନ୍ତିକାର ଉଭାବନ କରିଛନ୍ତି। ଏହି ଟିକାକୁ ବିଶ ପ୍ରଫେସର୍ ଆଶିଷ ବିଶାସ, ଆଇଏଲସର ଡ ଆଇଁ ସୋମବାର ଆଇଆଇଟି, ଆଇଏକ୍(ଏସ୍ ଏଙ୍କ ଦଳ ଏହି ସଫଳତା ପାଇଛି ।

ନାମକ ଘରୋଇ ସଂସ୍ଥା ସହ **ବିଶ୍ୱ ବଳାରରେ ଟିକା** ବୁଝାମଣାପତ୍ର ସାକ୍ଷରିତ ହୋଇଛି । ଏଚ୍ଏସ୍ପି ସବ-ଯୁନିଟ୍ ନାମକ ଏହି ଭାଳ୍ପିନ୍ ଯକ୍ଷା ନିୟନ୍ତଶରେ ବହୃତ ଉଲ ପ୍ରଭାବ ଦେଖାଉଛି । ଆଇଆଇଟିର

ହଳାରରେ ପହଞ୍ଚାଇବ। ଏବଂ ଅଧିକ ଗବେଷଣା ସୁନୀଲ କୁମାର ରାଘବଙ୍କ ନେତୃତ୍ୱରେ ଗବେଷକଙ୍କ



Media/Publication	The Sarkar		
Date	25 th November, 2025	Language	Odia
Headline	Clinical trials of tubercul	osis vaccine to begin soon.	

🔳 ଆଇଆଇଟି ଭୁବନେଶ୍ୱରର ସହଯୋଗରେ ଟିକା ପ୍ରସ୍ତୁତ

ଖୁବ୍ଶୀଘ୍ର ଯକ୍ଷା ଟିକାର କ୍ଲିନିକାଲ ଟ୍ରାଏଲ୍

ଖୋର୍ଦ୍ଧା,୨୪।୧୧(ସ.ପ୍ର): ଭାରତୀୟ ପ୍ରଯୁକ୍ତି ବିଦ୍ୟା ପ୍ରତିଷ୍ଠାନ(ଆଇଆଇଟି)ଭୁବନେଶ୍ୱର,କଟଣୀ ଏବଂ ଇନଷ୍ଟିଚ୍ୟୁଟ ଅଫ ଲାଲଫ ସାଇନ୍ନେସ (ଆଇଏଲଏସ), ଭୁବନେଶ୍ୱର, ଗବେଷଣା ବିକାଶ ନିଗମ (ଏନଆରଡ଼ିସି) ସହିତ, "ଏନଏସପି ସବୟୁନିଟ୍ ଭାକସିନ ଇନ୍ ଆଡକୁଭାଣ୍ଟ (ଡ଼ିଡ଼ିଏ) ଏଗନେଷ୍ଟ ମାଇକ୍ରୋ ବ୍ୟାକ୍ଟେରିୟମ ଟ୍ୟୁବରକ୍ୟୁଲୋସିସ୍" ଶାର୍ଷକ ଏକ ନୃତନ ଯକ୍ଷା ଟିକା କ୍ୟାଣ୍ଡିଡେଟର ପୁଯୁକ୍ତିବିଦ୍ୟା ହସ୍ତାନ୍ତର ଏବଂ ଭବିଷ୍ୟତର ବ୍ୟବସାୟାକରଣ ପାଇଁ ଟେକ୍ଇନଭେନସନ୍ ଲାଇଫକେୟାର ଲିମିଟେଡ୍ ସହିତ ଏକ ଚତ୍ରଃର୍ପାକ୍ଷିକ ଲାଇସେନ୍କ ଚୁକ୍ତିନାମା ସ୍ୱାକ୍ଷର କରିଛନ୍ତି । ବିଶ୍ୱ ସ୍ୱାସ୍ଥ୍ୟ ସଂଗଠନ ଦ୍ୱାରା ରିପୋର୍ଟ କରାଯାଇଥିବା ରିପୋର୍ଟ ଅନୁଯାୟ, ଯକ୍ଷା (ଟିବି) ବିଶ୍ୱର ସବୁଠାରୁ ମାରାତ୍ମକ ସଂକ୍ରାମକ ରୋଗ ମଧ୍ୟରୁ ଗୋଟିଏ, ଯାହା କେବଳ ୨୦୨୪ରେ ୧.୨୩ ନିୟୁତ ଲୋକଙ୍କ ଜୀବନ ନେଇଛି । ୨୦୩୦ ସୁଦ୍ଧା ଯକ୍ଷା ମହାମାରୀ ସମାସ୍ତ କରିବା ହେଉଛି ଜାତିଙ୍ସଘର ସ୍ଥାୟା ବିକାଶ ଲକ୍ଷ୍ୟ (ଏସଡିଜି) ଅଧୀନରେ ଏକ ପ୍ରମୁଖ ବିଶ୍ୱ ସ୍ୱାସ୍ଥ୍ୟ ପାଥମିକତା । ତଥାପି, ବିଶ୍ୱ ଏକ ଶତାବ୍ଦୀ ପୂର୍ବରୁ ବିକଶିତ ବାସିଲସ୍ କାଲମେଟ୍ ଗୁଏରିନ୍ (ବିସିକି) ଟିକା ଉପରେ ନିର୍ଭର କରିଆସ୍କଛି, ଯାହା ପ୍ରଖ୍ୟତଃ ଶିଶୁମାନଙ୍କୁ କେବଳ ସୀମିତ ସୁରକ୍ଷା ପ୍ରଦାନ କରେ ଏବଂ କିଶୋର ଏବଂ ବୟସ୍କମାନଙ୍କ ମଧ୍ୟରେ ପ୍ରଂସପ୍ରଂସ ଯକ୍ଷା ରୋକିବାରେ ମୁଖ୍ୟତଃ



ପ୍ରଭାବହୀନ । ଏହି ଗୁରୁଡ୍ପୂର୍ଣ୍ଣ ଅପରୁଣୀୟ ଆବଶ୍ୟକତାକୁ ପୂରଣ କରିବା ପାଇଁ, ଭାରତୀୟ ପ୍ରଯୁକ୍ତି ପ୍ରତିଷ୍ଠାନ (ଆଇଆଇଟି) ଭୁବନେଶ୍ୱର କଟଣାର ପ୍ରଫେସର ଆଶିଷ ବିଶ୍ୱାସ ଏବଂ ଭୁବନେଶ୍ୱରର ଇନଷ୍ଟିବ୍ୟୁଟ ଅଫ ଲାଇଫ ସାଇନ୍ନେସ (ଆଇଏଲଏସ)ର ଡ. ସୁନୀଲ କୁମାର ରାଘବଙ୍କ ନେତୃତ୍ୱରେ ମିଳିତ ଗବେଷଣା ମାଧ୍ୟମରେ ଏକ ପରବର୍ତ୍ତୀ ପିଡ଼ିର ଏଚ୍ଏସ୍ପି ସବ୍ୟନିଟ୍ ଟିକା ବିକଶିତ କରାଯାଇଛି । ଏହି ଟିକା କ୍ୟାଣ୍ଡିଡେଟ ବିସିଜି ଟିକାର ସୁରକ୍ଷାତ୍ମକ ପ୍ରଭାବକୁ ବ୍ରଦ୍ଧି କରିବା ସହିତ ଦ୍ରଡ଼ ହ୍ୟୁମୋରାଲ୍ ଏଙ କୋଷ-ମଧ୍ୟସ୍ଥଳା ପ୍ରତିରକ୍ଷା ପ୍ରତିକ୍ରିୟାକୁ ଟ୍ରିଗର କରିବା ପାଇଁ ଡିଜାଇନ୍ କରାଯାଇଛି। ଏହାର ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ସାର୍ବଜନୀନ ସ୍ୱାସ୍ଥ୍ୟ ସମ୍ଭାବନାକୁ ଦୃଷ୍ଟିରେ ରଖି, ଜାତୀୟ ଗବେଷଣା ବିକାଶ ନିଗମ (ଏନଆରଡିସି) ଏହି ପ୍ରଯୁକ୍ତିବିଦ୍ୟାକୁ ସକ୍ରିୟ ଭାବରେ ଚିହ୍ନଟ ଏବଂ ମୂଲ୍ୟାଙ୍କନ କରିଥିଲା ଏବଂ ଏହାର ଉନ୍ନତିକ ସନିଶିତ କରିବା ପାଇଁ

ଲାଇସେନ୍ସ ପ୍ରକ୍ରିୟାକୁ ସହଜ କରିଥିଲା । ଏହି ପ୍ରଯୁକ୍ତିବିଦ୍ୟା ବିନିମୟ ଆଇଏଲ୍ଏସ୍ ଭୁବନେଶ୍ୱର ପରିସରରେ ଅନେକ ବରିଷ୍ଠ ମାନ୍ୟଗଣ୍ୟ ବ୍ୟକ୍ତିଙ୍କ ଉପସ୍ଥିତିରେ ଅନୁଷ୍ଠିତ ହୋଇଥିଲା । ଯେଉଁଥିରେ ଆଇଆଇଟି ଭବନେଶର ନିର୍ଦ୍ଦେଶକ ପଫେସର ଶାପଦ କରମଲକର; ଆଇଏଲଏସର ନିର୍ଦ୍ଦେଶକ ଡ. ଦେବାଶିଷ ଦାଶ; ଆଇଆଇଟି ଭବନେଶରର ଡିନ୍ (ପ୍ରାୟୋଜିତ ଗବେଷଣା ଏବଂ ଶିନ୍ତ ପରାମର୍ଶବାତା) ପଫେସର ବିନକର ପାସଲା, ଏନଆରଡିସିର ବରିଷ ଆଞ୍ଚଳିକ ପରିଚାଳକ ଏବଂ ଆଉଟରିଚ୍ କାର୍ଯ୍ୟାଳୟ ମୁଖ୍ୟ ଡ. ବି.କେ, ସାହ୍ର ଟେକ୍ଇନଭେନସନ୍ ଲାଇଫକେୟାର ଲିମିଟେଡ଼ର ନିର୍ଦ୍ଦେଶକ ଏବଂ ସିଇଓ ସୟଦ ଏସ୍, ଅହନ୍ନଦ, ଆଇଏଲ୍ଏସ୍ ଭୁବନେଶ୍ୱରର ବୈଜ୍ଞାନିକ (ଏଫ୍) ଡ. ସୁନୀଲ କୁମାର ରାଘବ, ଆଇଆଇଟି ଭୁବନେଶ୍ୱରର ସ୍କଲ ଅଫ୍ ବେସିକ୍ ସାଇନ୍ସେସ୍ ପ୍ରଫେସର ଡ. ଆଶିଷ ବିଶ୍ୱାସ ଏବଂ ଅନ୍ୟାନ୍ୟ ସମ୍ମାନିତ ଅତିଥିମାନେ ଉପସ୍ଥିତ ଥିଲେ ।



Media/Publication	The Bizzbuzz news			
Date	26 th November, 2025 Language Odia			
Headline	IIT Bhubaneswar signs pact for novel TB vax tech			
Link		https://www.bizzbuzz.news/industry/pharma/iit-bhubaneswar-signs-pact-for-novel-tb-vax-tech-1378776		



Bhubaneswar: Taking a major stride toward advancing indigenous TB vaccine research, IIT Bhubaneswar, the Institute of Life Sciences (ILS), and the National Research Development Corporation (NRDC) have formalised a Quadripartite License Agreement with TechInvention Lifecare Limited.

https://www.bizzbuzz.news/industry/pharma/iit-bhubaneswar-signs-pact-for-novel-tb-vax-tech-1378776



Media/Publication	The PSU Watch			
Date	25 th November, 2025 Language Odia			
Headline	IIT Bhubaneswar, ILS transfer novel TB vaccine technology to TechInvention Lifecare; NRDC facilitates licensing			
Link	https://psuwatch.com/newsupdates/iit-bhubaneswar-ils-transfer-novel-tb-vaccine-technology-to-techinvention-lifecare-nrdc-facilitates-licensing			



The agreement covers the technology transfer and commercialization of a next-generation vaccine candidate, "HSP Subunit Vaccine in Adjuvant (DDA) Against Mycobacterium tuberculosis," developed to address the limitations of the century-old Bacillus Calmette Guérin (BCG) vaccine currently in use.

According to WHO estimates, tuberculosis claimed 1.23 million lives in 2024, remaining one of the world's deadliest infectious diseases. The new vaccine candidate aims to generate strong humoral and cell-mediated immune responses and is designed to improve the protective efficacy of the existing BCG vaccine, especially among adolescents and adults—groups where BCG has shown limited effectiveness.

The technology has been jointly developed by Prof. Ashis Biswas of IIT Bhubaneswar and Dr. Sunil Kumar Raghav of ILS Bhubaneswar. NRDC proactively identified and evaluated the innovation and facilitated the licensing process to accelerate its advancement towards commercialization.

The technology exchange ceremony was held at ILS Bhubaneswar in the presence of senior officials, including ILS Director Dr. Debasis Dash; IIT Bhubaneswar Director Prof. Shreepad Karmalkar; IIT Bhubaneswar Dean (Sponsored Research & Industrial Consultancy) Prof. Dinakar Pasla; NRDC Senior Regional Manager Dr. B. K. Sahu; TechInvention Lifecare Director & CEO Syed S. Ahmed; Dr. Raghav; and Prof. Biswas, among others.

The HSP Subunit Vaccine represents a significant milestone in India's scientific efforts to develop advanced interventions against Mycobacterium tuberculosis. The collaboration underscores the strength of



India's research ecosystem and its commitment to addressing major public health challenges through indigenous innovation.

TechInvention Lifecare Limited, the licensed industry partner, will lead the transition of the technology from the research stage to product development, validation and eventual market readiness. With experience in vaccine development, manufacturing and regulatory processes, the company is expected to play a pivotal role in ensuring the vaccine candidate moves efficiently through the development pipeline.