



ABSTRACT

064721

Establishment of strengthening the surveillance of Acute Encephalitis Syndrome Under Tamil Nadu Innovation Initiative (TANII) 2018-2019 – Administrative and Financial sanction accorded – Orders –Issued.

HEALTH AND FAMILY WELFARE (P1) DEPARTMENT

G.O.(D).No.1063

Dated: 25.06.2019
Vihari, Aani-10
Thiruvalluvar Aandu – 2050.

Read :

From the Director of Public Health and Preventive Medicine,
Letter No.51098 /EPI/ S1/2018, dated 24.01.2019.

ORDER :

The Director of Public Health and Preventive Medicine in his letter read above has sent a proposal recommended by State Planning Commission under Tamil Nadu Innovation Initiative(TANII) (Second Round) 2018-2019 as follows:-

a) Introduction:

Acute Encephalitis Syndrome (AES) is an epidemiological term used to describe central nervous system disease due to infectious causative organism. Acute Encephalitis Syndrome (AES) is a serious condition needing critical care. Acute Encephalitis Syndrome (AES) occurs as a sporadic case or in the form of outbreaks. Many viral, non- viral causes were investigated, and causes had been identified in many cases. But for large number of cases no etiological agents had been fixed. As children are more vulnerable, they face the brunt of all these in the form of sporadic and outbreak situations. There are large number of causative agents that can give clinical presentation of Acute Encephalitis Syndrome(AES). They belong to bacterial, parasitic, fungal and viral. Acute Encephalitis Syndrome(AES) caused by Japanese Encephalitis is reported mainly from Assam, Bihar, Karnataka, Tamil Nadu and Uttar Pradesh, which contributes approximately 80% of cases and deaths respectively with a case fatality rate ranging from 20 to 25%. In Tamilnadu, based on surveillance on Acute Encephalitis Syndrome(AES), 1358 cases were reported in the year 2018.

b) Rationale for Acute Encephalitis Syndrome(AES) Diagnosis:

The inference from above table is that in only 10% of Acute Encephalitis Syndrome, the cause has been established. The cause of 90% of Acute Encephalitis Syndrome(AES) were undetected. Hence, there is need for screening for the other agents in the laboratory. Some of the viral agents like Herpes or Cyto Megalo Virus (CMV) if identified by laboratory confirmation has antiviral drugs available against them for treatment.

(P.T.O)

c) Approach to Strengthen Acute Encephalitis Syndrome(AES) Diagnosis:

It is proposed to strengthen the surveillance for AES at two levels.

Level 1 – Screening of Acute Encephalitis Syndrome cases for Japanese Encephalitis (JE) and Non-Japanese Encephalitis etiology such as, Dengue, Chikungunya, Measles, Mumps, Leptospira, Scrub typhus etc. at District Public Health Laboratories and Medical College Hospitals. The samples will be referred to apex Laboratory for confirmation by Molecular Diagnosis.

Level 2 – Strengthening of Apex Laboratory at King Institute of Preventive Medicine by inclusion of a battery of laboratory investigations using the molecular tool for confirmation of diagnosis and mapping of causative agent.

d) Sample Referral Network:

An effective sample referral network will be established across the state through the DPHL network in Tamil Nadu. Serum/ Plasma, CSF are the samples to be collected and referral to Apex Laboratory for confirmation of diagnosis. Samples from suspected Acute Encephalitis Syndrome (AES) cases admitted in District Head Quarters Hospitals and Government Medical Colleges will be subjected to initial screening at Level 1 and subsequently the samples will be immediately referred to the Apex Laboratory for confirmation by Molecular Diagnosis.

e) Sample Collection:

The samples for Acute Encephalitis Syndrome(AES) to be collected in an externally threaded polypropylene vial, mouth sealed and sent in cold chain to the lab. The lab request form to be filled in with all details. The lab request form specific for Acute Encephalitis Syndrome(AES) will be used. Necessary training will be organized for collection and transport of samples to next level.

f) Sample Transport:

Samples collected from different centres in Tamil Nadu will be transported to KIPMR in cold chain. Serum samples used for serology will be sent within four days, till then the samples can be stored in the refrigerator. Plasma/ CSF samples required for PCR will be sent immediately, till then it can be stored in the freezer compartment of fridge, but preferably shipped as soon as possible. Samples to be packed in triple layered packing in good quality vials may be used.

g) Benefits

- The etiology of unexplained Acute Encephalitis Syndrome will be established.
- For treatable conditions, the deaths due to acute encephalitis syndrome will be prevented.

(Cont...)

ABSTRACT- BUDGET REQUIREMENT

| S.No | Institution and Requirement | Non-Recurring (Rs in Lakhs) | Recurring Cost for 3 Yrs (Rs in Lakhs) | Total Cost (Rs in Lakhs) |
|------|---|-----------------------------|--|--------------------------|
| 1 | Level 1 - DPHL Labs ELISA Kits for DPHL (Rs 1 lakh/Yr x 32 Units x 3 Yrs) | | 96.00 | 96.00 |
| 2 | Level 1 - DME Medical College Labs ELISA Kits for Med.Col (Rs 1 lakh/Yr x 22 Units x 3 Yrs) | | 66.00 | 66.00 |
| 3 | Level 2 Apex Lab – KIPM 3.1 Civil Work & Modular Lab | 150.00 | - | 150.00 |
| | 3.2 Equipment | 159.45 | - | 159.45 |
| | 3.3 ELISA Kits | - | 176.40 | 176.40 |
| | 3.4 PCR Reagents | - | 87.30 | 87.30 |
| | TOTAL | 309.45 | 425.70 | 735.15 |

| Detailed Budget Estimates | | | | |
|---|-------------------|-------------------|-------------------|-------------------|
| S.No and Item | 1st year | 2nd year | 3rd year | Total |
| | Budgetary support | Budgetary support | Budgetary support | Budgetary support |
| A.Recurring | - | - | - | - |
| (i)Staff cost | - | - | - | - |
| (ii)Other cost - Reagents and Consumables | 141.9 | 141.9 | 141.9 | 425.7 |
| Total - A | | | | 425.7 |
| B. Non- Recurring | | | | |
| (i)Machinery and equipment | 157.45 | - | - | 157.45 |
| (ii)Computer and Accessories | 2 | - | - | 2 |
| (iii) Civil Works | 150 | - | - | 150 |
| Total - B | | | | 309.45 |
| Grand Total | 451.35 | 141.9 | 141.9 | 735.15 |

2) He has requested the Government to sanction of sum of Rs.735.15 lakhs for strengthening the surveillance of Acute Encephalitis Syndrome (AES) in District Public Health Laboratories, Medical College Hospital and King Institute of Preventive Medicine in Tamil Nadu. (Break up details enclosed in the Annexure-I,II,III)

(P.T.O)

3) The Government have decided to accept the proposal of Director of Public Health and Preventive Medicine recommended under State Planning commission under Tamil Nadu Innovation Initiative(TANII) scheme 2018-2019 Second Round at an outlay of Rs. 451.35 (Rupees Four hundred and Fifty one lakhs and Thirty five thousand only) for strengthening of the surveillance of Acute Encephalitis Syndrome (AES) in District Public Health Laboratories, Medical College Hospital and King Institute of Preventive Medicine in Tamil Nadu as detailed below:

| Sl. No. | Description | Amount (Rs.in lakhs) |
|----------------|---|-------------------------|
| 2210-06-101-KN | | |
| (i) | 324 Materials and Supplies (DPC 2210 06 101 KN 32401) | 141.90 |
| (ii) | 376 Computer and accessories - 01 Purchase (DPC 2210 06 101 KN 37601) | 2.00 |
| (iii) | 319 Machinery and Equipments - 01 Purchase (DPC 2210 06 101KN 31901) | 157.45 |
| 4210-04-051-JB | | |
| (iv) | 416 01-Major works (DPC 4210 04 051 JB 41601) | 150.00 |

4) The amount sanctioned in para 3 above shall be met from the State innovation fund and debited to the following head of account:-

(i) Revenue Expenditure:

"2210-Medical and Public Health-06 Public Health- 101 Prevention and control of diseases - state's Expenditure - KN Strengthening the surveillance of Acute Encephalitis Syndrome in District Public Health Laboratories, Medical College Hospitals and King Institute of Tamil Nadu under State Innovation Fund.

- a. 319 Machinery and Equipments - 01 Purchase - Rs.157.45 Lakhs (DPC 2210 06 101 KN 19 16)" (Old) DPC 2210 06 101 KN 31901 (IFHRMS)
- b. "324 Materials and Supplies 01-Materials and supplies - Rs.141.90 Lakhs (DPC 2210 06 101 KN 24 06)" (Old) DPC 2210 06 101 KN 32401 (IFHRMS)
- c. "376 Computer and accessories - 01 Purchase - Rs.2.00 lakhs (DPC 2210 06 101KN 76 16) (Old) DPC 2210 01 101 KN 37601 (IFHRMS)

(Cont.)

ii) Capital Expenditure:

"4210-Capital Outlay on Medical and Public Health-04 - Public Health-051 Construction State's Expenditure - JB Construction of Modular Lab under State Innovation Fund - 416 - 00 Major Works" - Rs.150 lakhs. (DPC 4210 04 051 JB 41601)"

5) The above expenditure shall be adjusted by deducting under the following head of account:-

- a. "2210-Medical and Public Health-06 Public Health-902. Deduct Amount met from State Innovation Fund - State's Expenditure-JA. Deduct - Amount met from State Innovation Fund-330. Inter-Account Transfers 01-Inter-Account Transfers" (DPC 2210-06-902-JA-33001).
- b. "4210-Capital Outlay on Medical and Public Health-04 Public Health-902. Deduct Amount met from State Innovation Fund - State's Expenditure-JA. Deduct- Amount met from State Innovation Fund - 430. Inter-Account Transfers" 01 - Inter-Account Transfer (DPC 4210-04-902-JA-43001).

By contra debiting from,

"J. Reserve Fund - (b) Reserve Funds not bearing Interest - 8229-00. Development and Welfare Funds - 200. Other Development and Welfare Funds - BE. State Innovation Fund. (D.P.Code.8229-00-200 BE-0006) (Outgo)

6) The Director of Public Health and Preventive Medicine is directed that the amount sanctioned in para 3 shall not be paid in cash but credited to the following P.D. Account of Tamil Nadu Medical Services Corporation Limited:

"K Deposit and Advances (b) Deposits not bearing interest - 8443.00 - Civil Deposit - 800 - Other Deposits - CE Deposits of Tamil Nadu Medical Services Corporation Limited. (DPC 8443 00 800 CE 000H) (Receipts)

7) The Director of Public Health and Preventive Medicine is permitted to execute the Civil Works through Public Works Department for construction of above work and also directed to draw disburse the amount sanctioned in Para 3 (iv) above.

8) Necessary additional funds will be provided in Revised Estimate/Final Modified Appropriation 2019-2020. However, this expenditure shall be brought to the notice of the legislature by Specific Inclusion in the Supplementary Estimates 2019-2020. Pending provision of funds in the Revised Estimate 2019-2020. Pending provision of funds in the Revised Estimate 2019-2020, the Director, Public Health and Preventive Medicine, is authorized to incur the amount sanctioned in para 3 above. The Director of Public Health and Preventive Medicine, is requested to send draft explanatory notes for Supplementary Estimates 2019 - 2020 to

(P.T.O)

Government in Finance (BG-I) Department and also to include the expenditure while sending the budget proposals for Revised Estimate/Final Modified Appropriation 2019-2020 to Government in Finance (Health-I) Department without fail.

9) This order issues with the concurrence of the Finance Department vide its U.O.No.16487/Health-I/2019, dated 20.06.2019 and ASL No. 482 (Four hundred and eighty two).

(BY ORDER OF THE GOVERNOR)

Dr. BEELA RAJESH
SECRETARY TO GOVERNMENT

To
The Director of Public Health and Preventive Medicine, Chennai-600 006.
The Principal Account General, Chennai-600 018.
The Pay and Accounts Officer, (South), Chennai-600 035.

Copy to:-

The Planning Development and Special Initiatives Department, Chennai-600 009.
The State Planning Commission, Chepauk, Chennai-600 005.
The Finance(Health-I/BG-II/BG-I) Department, Chennai-600 009.
The Health and Family Welfare (Data cell), Chennai-600 009.
Stock File / Spare Copy.

//FORWARDED BY ORDER//

Handwritten signature and date
SECTION OFFICER

Handwritten initials and date

(Cont)

Annexure I

G.O.(D) No.1063, Health and Family Welfare (P1) Department, dated 25.06.2019

| 3.2 EQUIPMENT COST | | | | |
|--------------------|-----------------------------|-------------------|----------------------------------|-----------------------|
| Sl.No | Name of the Equipment | Required Quantity | Approximate cost in INR/Per Unit | Total in INR |
| 1 | Autoclave | 1 | 3,50,000.00 | 3,50,000.00 |
| 2 | Annexure I | 2 | 60,000.00 | 1,20,000.00 |
| 3 | Carbon-Di-oxide Incubator | 2 | 4,50,000.00 | 9,00,000.00 |
| 4 | Centrifuge (refrigerated) | 2 | 3,00,000.00 | 6,00,000.00 |
| 5 | Centrifuge | 6 | 1,00,000.00 | 6,00,000.00 |
| 6 | Computer | 4 | 50,000.00 | 2,00,000.00 |
| 7 | Printer & Photo Copier | 1 | 75,000.00 | 75,000.00 |
| 8 | Fluorescent Microscope | 1 | 5,00,000.00 | 5,00,000.00 |
| 9 | Millipore | 2 | 5,00,000.00 | 10,00,000.00 |
| 10 | Deep freezer -20 | 3 | 3,00,000.00 | 9,00,000.00 |
| 11 | Electronic balance | 2 | 2,00,000.00 | 4,00,000.00 |
| 12 | Electrophoresis | 1 | 50,000.00 | 50,000.00 |
| 13 | Hot air oven | 2 | 2,00,000.00 | 4,00,000.00 |
| 14 | Lyophilizer | 1 | 5,00,000.00 | 5,00,000.00 |
| 15 | ELISA READER with WASHER | 1 | 3,00,000.00 | 3,00,000.00 |
| 16 | Microscope | 2 | 3,00,000.00 | 6,00,000.00 |
| 17 | Magnetic stirrer | 1 | 1,00,000.00 | 1,00,000.00 |
| 18 | Real time PCR | 1 | 18,00,000.00 | 18,00,000.00 |
| 19 | Vortex Mixer | 12 | 30,000.00 | 3,60,000.00 |
| 20 | Conventional PCR machine | 2 | 5,50,000.00 | 11,00,000.00 |
| 21 | pH meter | 1 | 1,50,000.00 | 1,50,000.00 |
| 22 | Refrigerator | 2 | 30,000.00 | 60,000.00 |
| 23 | Water Bath | 2 | 80,000.00 | 1,60,000.00 |
| 24 | Biosafety Cabinets Class II | 12 | 2,50,000.00 | 30,00,000.00 |
| 25 | Ultra-low deep freezer | 2 | 5,00,000.00 | 10,00,000.00 |
| 26 | Liquid Nitrogen Cylinder | 2 | 80,000.00 | 1,60,000.00 |
| 27 | CO2 Cylinder | 2 | 80,000.00 | 1,60,000.00 |
| 28 | Pipettes | 20 | 16,000.00 | 3,20,000.00 |
| 29 | Electronic pipette | 1 | 50,000.00 | 50,000.00 |
| 30 | Electronic dispenser | 1 | 30,000.00 | 30,000.00 |
| TOTAL | | | | 1,59,45,000.00 |

Dr. BEELA RAJESH,
SECRETARY TO GOVERNMENT

// TRUE COPY //

SECTION OFFICER

Annexure-II

REAGENTS COST
A. ELISA KITS:

G.O.(D) No.1063, Health and Family Welfare (P1) Department, dated 25.06.2019

| S No | Name of the Virus Test Kit | 1 st year | | |
|------|----------------------------|----------------------|-----------|-----------------|
| | | Required No of kits | Cost /kit | Amount required |
| 1 | Viral transport Media | 2000 | 120.00 | 2,40,000.00 |
| 2 | IgM Scrub Typhus | 30 | 18,000.00 | 5,40,000.00 |
| 3 | IgM ELISA Leptospirosis | 30 | 15,000.00 | 4,50,000.00 |
| 4 | IgM ELISA for Dengue | 30 | 10,000.00 | 3,00,000.00 |
| 5 | NS1 ELISA for Dengue | 30 | 15,000.00 | 4,50,000.00 |
| 6 | IgM ELISA Chikungunya | 30 | 10,000.00 | 3,00,000.00 |
| 7 | JEV IgM ELISA | 60 | 11,000.00 | 6,60,000.00 |
| 8 | IgM ELISA for WNV | 30 | 27,000.00 | 8,10,000.00 |
| 9 | IgM ELISA for Measles | 30 | 18,000.00 | 5,40,000.00 |
| 10 | IgM ELISA for Mumps | 30 | 15,000.00 | 4,50,000.00 |
| 11 | IgM ELISA Chicken pox | 30 | 15,000.00 | 4,50,000.00 |
| 12 | IgM ELISA for Parvo | 30 | 13,000.00 | 3,90,000.00 |
| 13 | IgM ELISA for CMV | 30 | 10,000.00 | 3,00,000.00 |
| | | Total | | 58.80 Lakhs |

Dr. BEELA RAJESH,
SECRETARY TO GOVERNMENT

// TRUE COPY //

SECTION OFFICER

Annexure III
(PCR Reagents and KITS)

G.O.(D) No.1063, Health and Family Welfare (P1) Department, dated 25.06.2019

| S.No. | Name of the Virus Test Kit | No. of kits | Cost /kit | Total cost |
|-------|--|-------------|--------------|---------------------|
| 1 | Viral RNA EXTN Kit (1*250rXn) | 8 | 80,000 | 64,00,00 |
| 2 | DNA EXTN Kit (1*250rXn) | 8 | 35,000 | 2,80,000.00 |
| 3 | DNAPCR Kit (1*250rXn) | 4 | 30,000 | 1,20,000.00 |
| 4 | cDNA Kit (1*200) | 10 | 45,000 | 4,50,000.00 |
| 5 | SS RTPCR(1*500rXn) | 4 | 1,25,000 | 5,00,000.00 |
| 6 | Primers & Probes for N, Meningitidis, H influenzae, S.pneumoniae | 2000 | 180.00 | 3,60,000.00 |
| 7 | Enterovirus Primers and Probes | 2000 | 120.00 | 2,40,000.00 |
| 8 | Dengue Virus Primers and Probes | 2000 | 100.00 | 2,00,000.00 |
| 9 | Herpes Realtime PCR (1&2) (HHV 6) * | 2000 | 40.00 | 80,000.00 |
| 10 | CMV Realtime PCR and Adenovirus PCR* | 2000 | 20.00 | 40,000.00 |
| | | | TOTAL | 29,10,000.00 |

Dr. BEELA RAJESH,
SECRETARY TO GOVERNMENT

// TRUE COPY //

SECTION OFFICER