FIG. 1

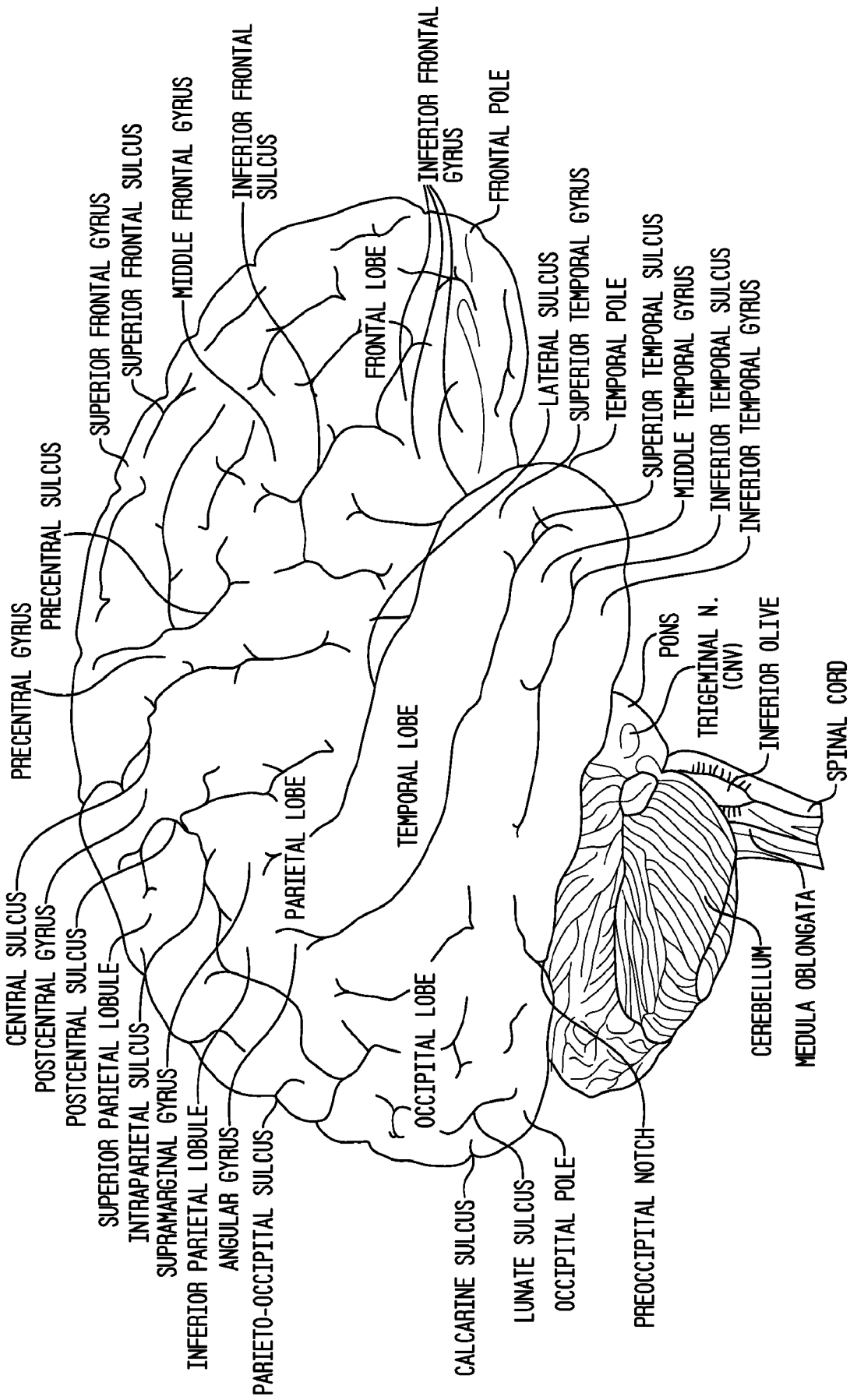

CENTRAL SULCUS
POSTCENTRAL GYRUS
POSTCENTRAL SULCUS
SUPERIOR PARIETAL LOBULE
INTRAPARIETAL SULCUS
SUPRAMARGINAL GYRUS
INFERIOR PARIETAL LOBULE
ANGULAR GYRUS
PARIETO-OCCIPITAL SULCUS
PRECENTRAL GYRUS
PRECENTRAL SULCUS
SUPERIOR FRONTAL GYRUS
SUPERIOR FRONTAL SULCUS
MIDDLE FRONTAL GYRUS
INFERIOR FRONTAL SULCUS
PARIETAL LOBE
TEMPORAL LOBE
OCCIPITAL LOBE
CALCARINE SULCUS
LUNATE SULCUS
OCCIPITAL POLE
FRONTAL LOBE
INFERIOR FRONTAL GYRUS
FRONTAL POLE
LATERAL SULCUS
SUPERIOR TEMPORAL GYRUS
TEMPORAL POLE
SUPERIOR TEMPORAL SULCUS
MIDDLE TEMPORAL GYRUS
INFERIOR TEMPORAL SULCUS
INFERIOR TEMPORAL GYRUS
PONS
TRIGEMINAL N. (CNV)
INFERIOR OLIVE
SPINAL CORD
PREOCCIPITAL NOTCH
CEREBELLUM
MEDULA OBLONGATA

FIG. 2

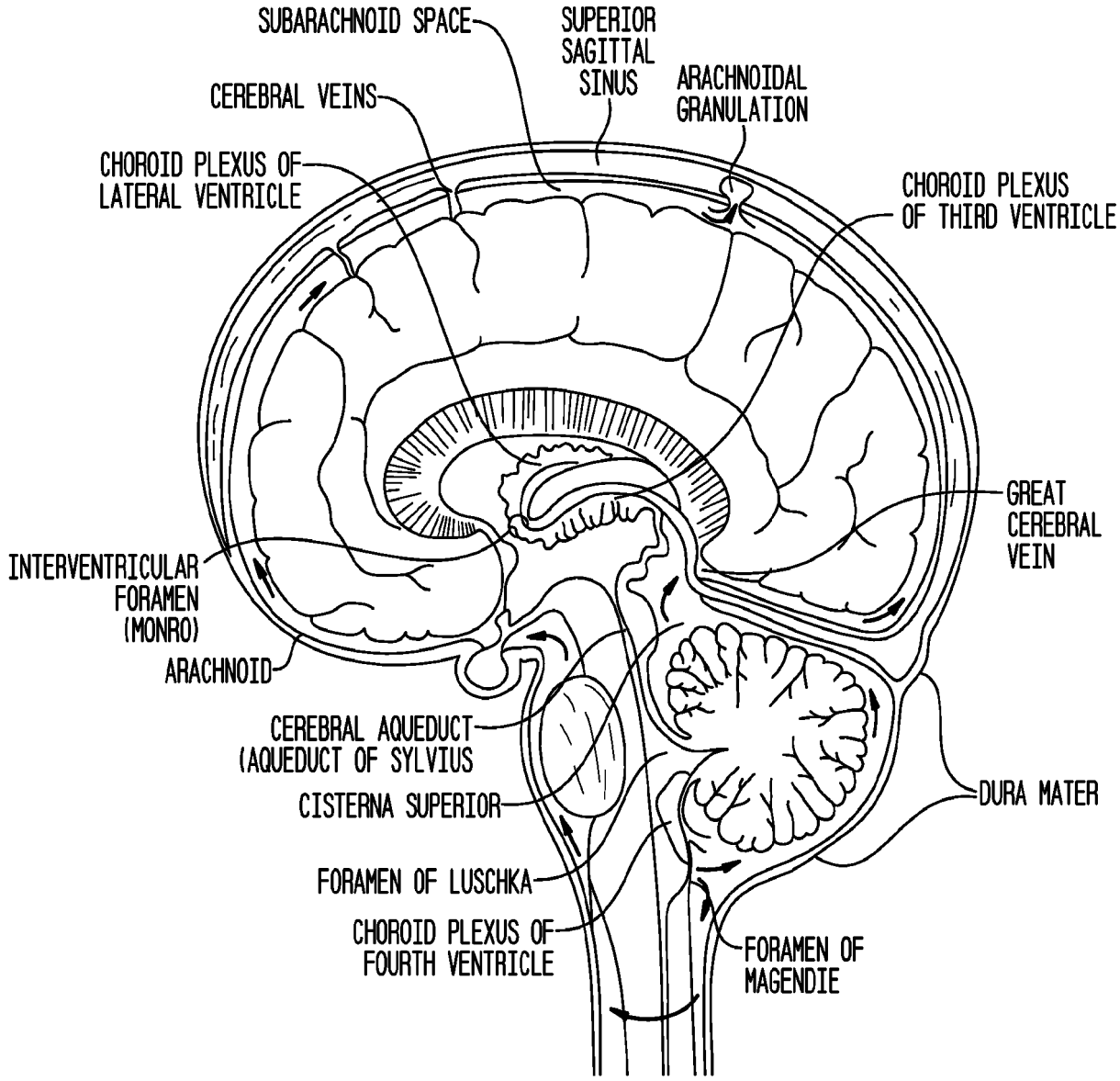

SUBARACHNOID SPACE
SUPERIOR SAGITTAL SINUS
ARACHNOIDAL GRANULATION
CEREBRAL VEINS
CHOROID PLEXUS OF LATERAL VENTRICLE
CHOROID PLEXUS OF THIRD VENTRICLE
GREAT CEREBRAL VEIN
INTERVENTRICULAR FORAMEN (MONRO)
ARACHNOID
CEREBRAL AQUEDUCT (AQUEDUCT OF SYLVIUS
CISTERNA SUPERIOR
DURA MATER
FORAMEN OF LUSCHKA
CHOROID PLEXUS OF FOURTH VENTRICLE
FORAMEN OF MAGENDIE

FIG. 3

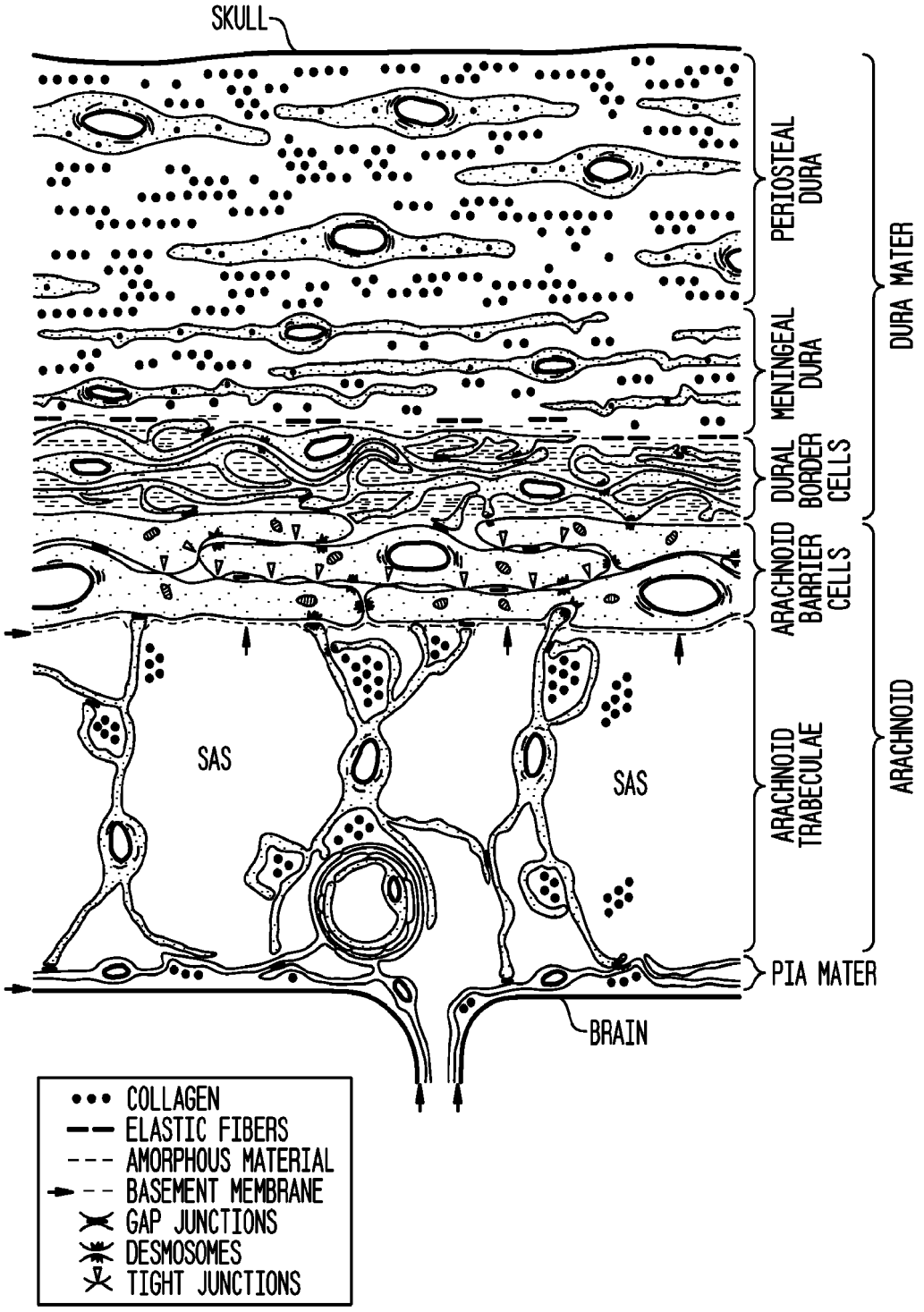

SKULL
PERIOSTEAL DURA
MENINGEAL DURA
DURAL BORDER CELLS
DURA MATER
ARACHNOID BARRIER CELLS
ARACHNOID TRABECULAE
ARACHNOID
SAS
SAS
PIA MATER
BRAIN
COLLAGEN
ELASTIC FIBERS
AMORPHOUS MATERIAL
BASEMENT MEMBRANE
GAP JUNCTIONS
DESMOSOMES
TIGHT JUNCTIONS

FIG. 4

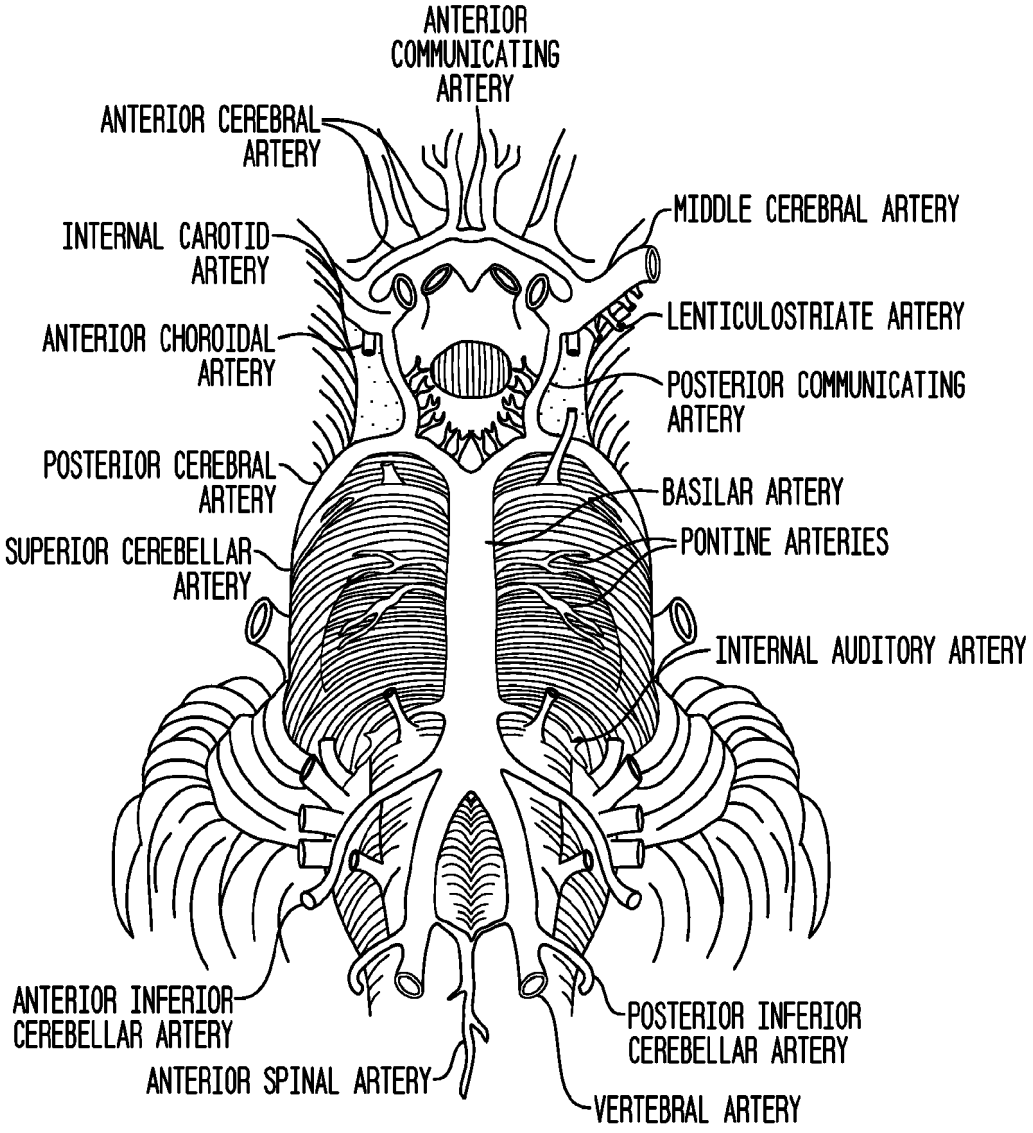

ANTERIOR COMMUNICATING ARTERY
ANTERIOR CEREBRAL ARTERY
MIDDLE CEREBRAL ARTERY
INTERNAL CAROTID ARTERY
LENTICULOSTRIATE ARTERY
ANTERIOR CHOROIDAL ARTERY
POSTERIOR COMMUNICATING ARTERY
POSTERIOR CEREBRAL ARTERY
BASILAR ARTERY
SUPERIOR CEREBELLAR ARTERY
PONTINE ARTERIES
INTERNAL AUDITORY ARTERY
ANTERIOR INFERIOR CEREBELLAR ARTERY
POSTERIOR INFERIOR CEREBELLAR ARTERY
ANTERIOR SPINAL ARTERY
VERTEBRAL ARTERY

FIG. 5

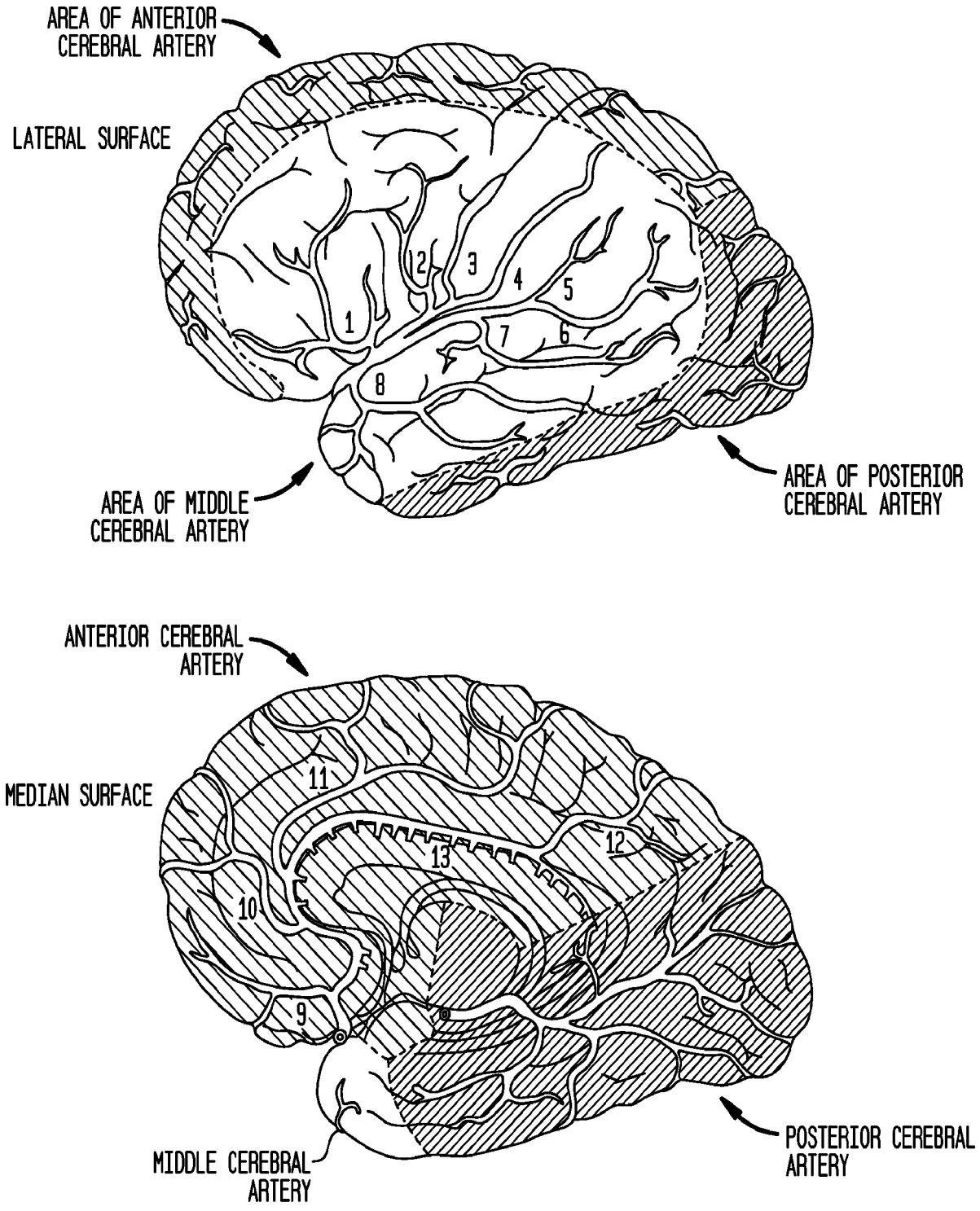

AREA OF ANTERIOR CEREBRAL ARTERY
LATERAL SURFACE
1
2
3
4
5
6
7
8
AREA OF MIDDLE CEREBRAL ARTERY
AREA OF POSTERIOR CEREBRAL ARTERY
ANTERIOR CEREBRAL ARTERY
MEDIAN SURFACE
9
10
11
12
13
MIDDLE CEREBRAL ARTERY
POSTERIOR CEREBRAL ARTERY

FIG. 6

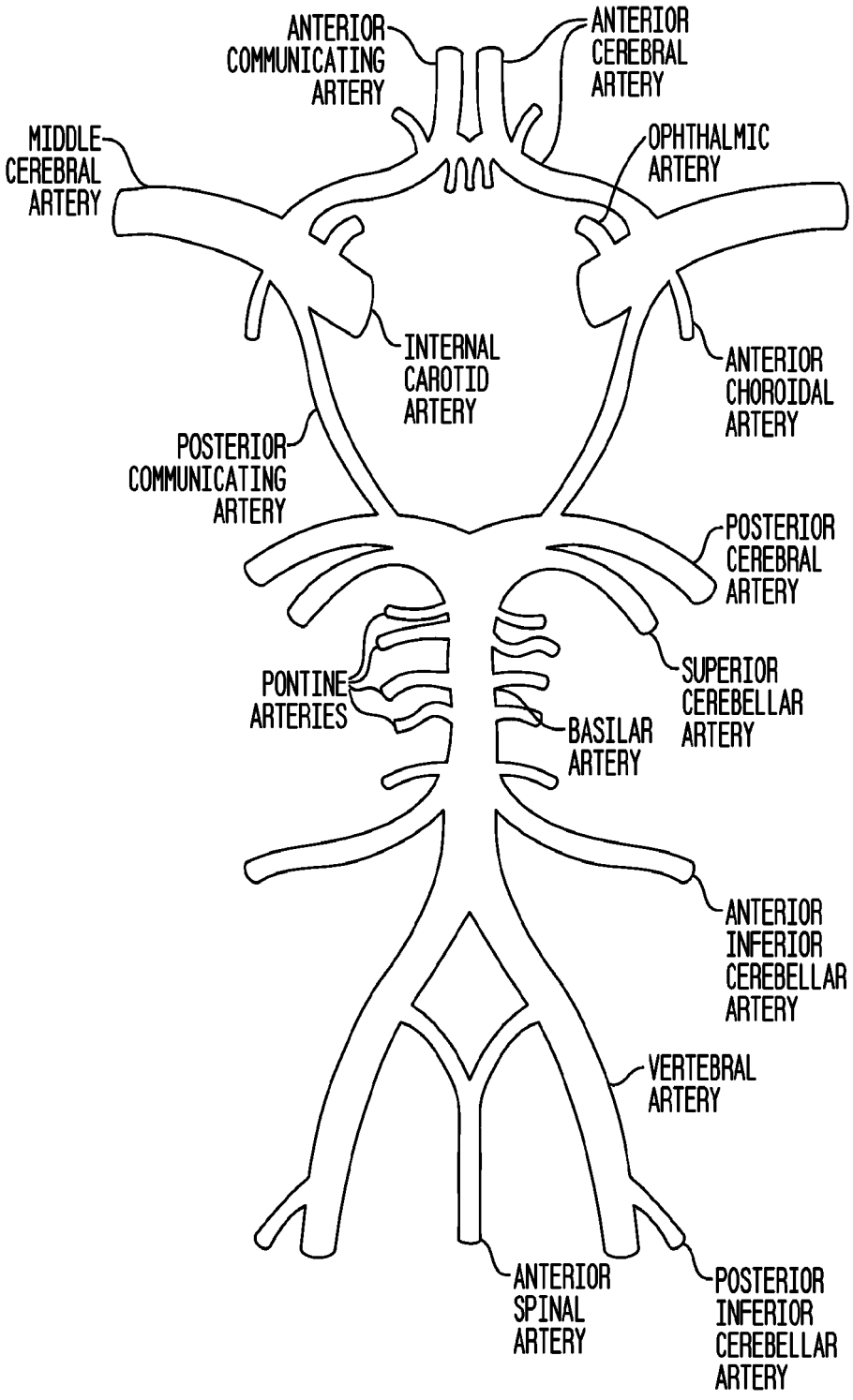

ANTERIOR COMMUNICATING ARTERY
ANTERIOR CEREBRAL ARTERY
MIDDLE CEREBRAL ARTERY
OPHTHALMIC ARTERY
INTERNAL CAROTID ARTERY
ANTERIOR CHOROIDAL ARTERY
POSTERIOR COMMUNICATING ARTERY
POSTERIOR CEREBRAL ARTERY
PONTINE ARTERIES
SUPERIOR CEREBELLAR ARTERY
BASILAR ARTERY
ANTERIOR INFERIOR CEREBELLAR ARTERY
VERTEBRAL ARTERY
ANTERIOR SPINAL ARTERY
POSTERIOR INFERIOR CEREBELLAR ARTERY

FIG. 7
ARTERIES OF BRAIN (FRONTAL VIEW AND SECTION)

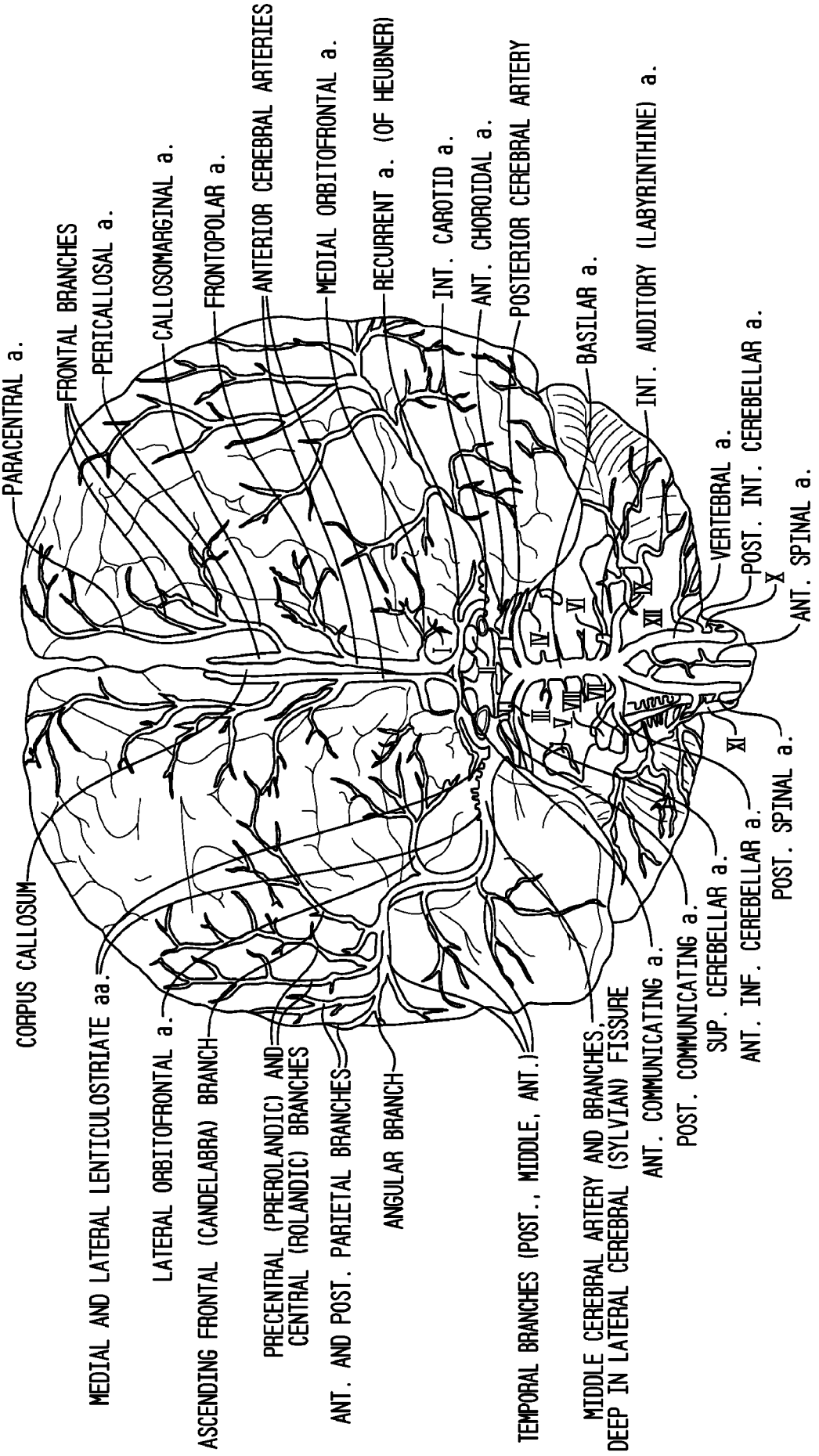


FIG. 8

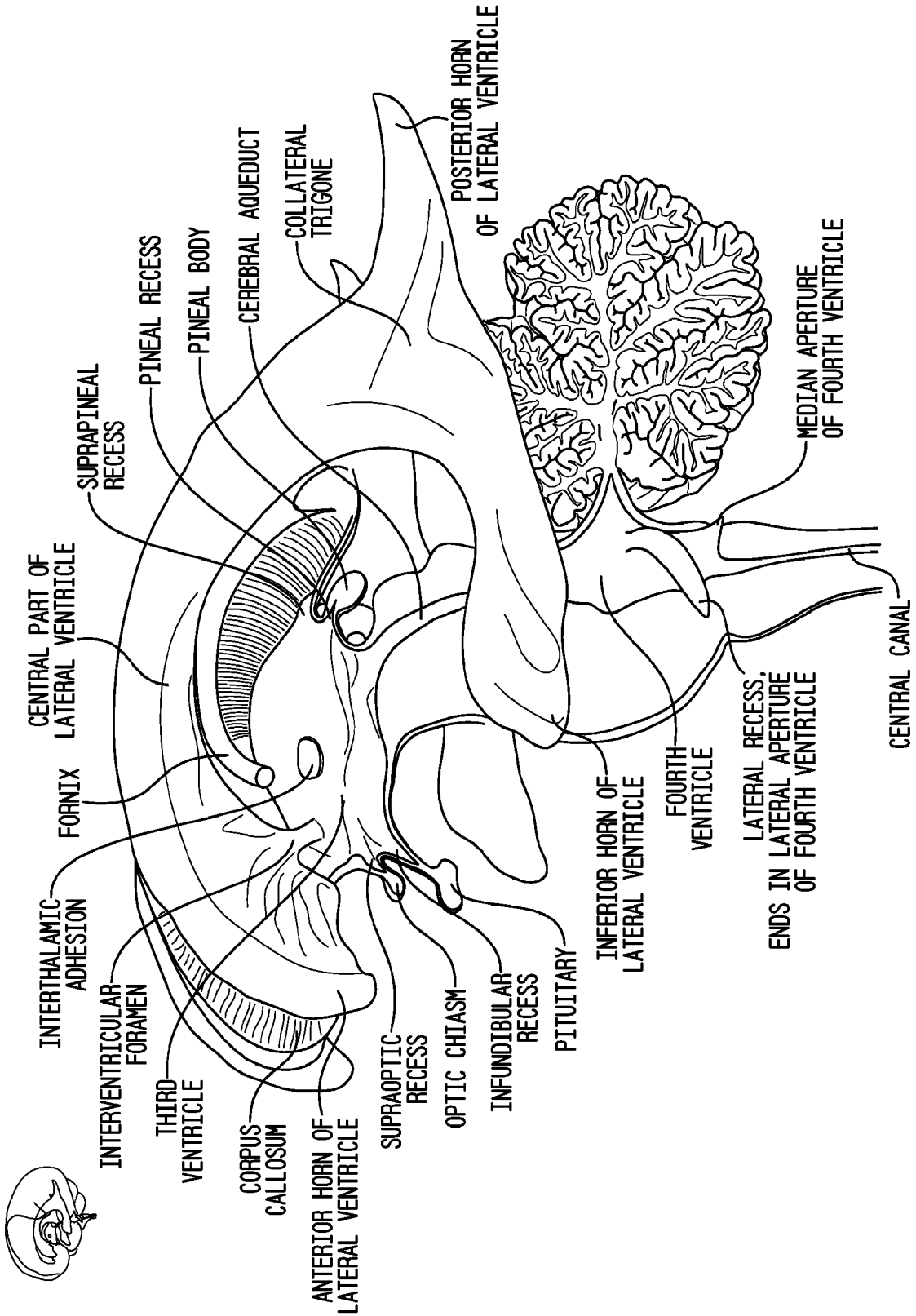

CENTRAL PART OF LATERAL VENTRICLE
SUPRAPINEAL RECESS
PINEAL RECESS
PINEAL BODY
CEREBRAL AQUEDUCT
COLLATERAL TRIGONE
POSTERIOR HORN OF LATERAL VENTRICLE
MEDIAN APERTURE OF FOURTH VENTRICLE
FORNIX
INTERTHALAMIC ADHESION
INTERVENTRICULAR FORAMEN
THIRD VENTRICLE
CORPUS CALLOSUM
ANTERIOR HORN OF LATERAL VENTRICLE
SUPRAOPTIC RECESS
OPTIC CHIASM
INFUNDIBULAR RECESS
PITUITARY
INFERIOR HORN OF LATERAL VENTRICLE
FOURTH VENTRICLE
LATERAL RECESS; ENDS IN LATERAL APERTURE OF FOURTH VENTRICLE
CENTRAL CANAL

FIG. 9

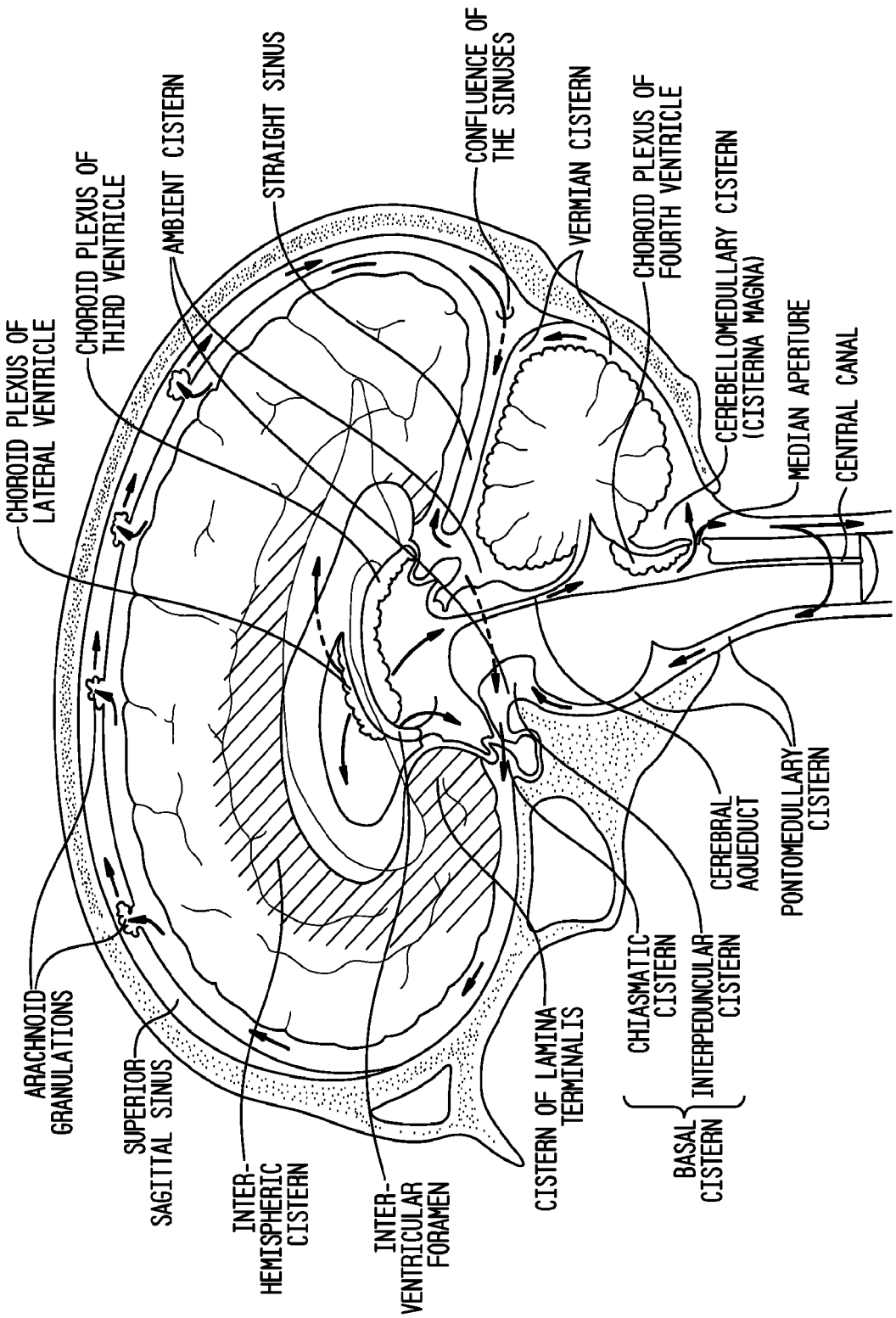

CHOROID PLEXUS OF LATERAL VENTRICLE
CHOROID PLEXUS OF THIRD VENTRICLE
AMBIENT CISTERN
STRAIGHT SINUS
CONFLUENCE OF THE SINUSES
VERMIAN CISTERN
CHOROID PLEXUS OF FOURTH VENTRICLE
CEREBELLOMEDULLARY CISTERN (CISTERNA MAGNA)
MEDIAN APERTURE
CENTRAL CANAL
ARACHNOID GRANULATIONS
SUPERIOR SAGITTAL SINUS
INTER-HEMISPHERIC CISTERN
INTER-VENTRICULAR FORAMEN
CISTERN OF LAMINA TERMINALIS
CHIASMATIC CISTERN
INTERPEDUNCULAR CISTERN
BASAL CISTERN
CEREBRAL AQUEDUCT
PONTOMEDULLARY CISTERN

FIG. 10A

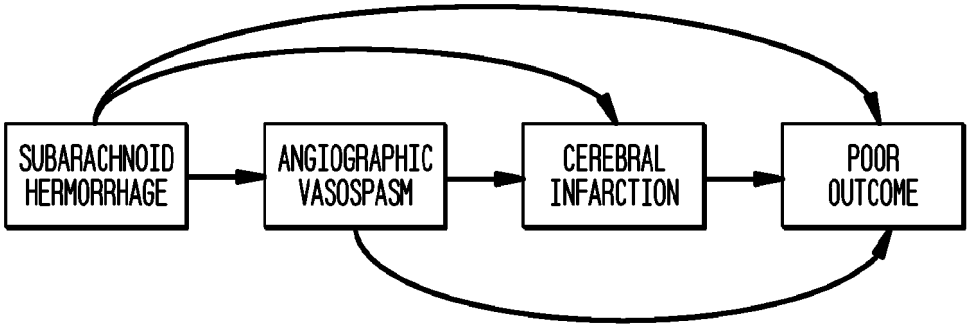


FIG. 10B

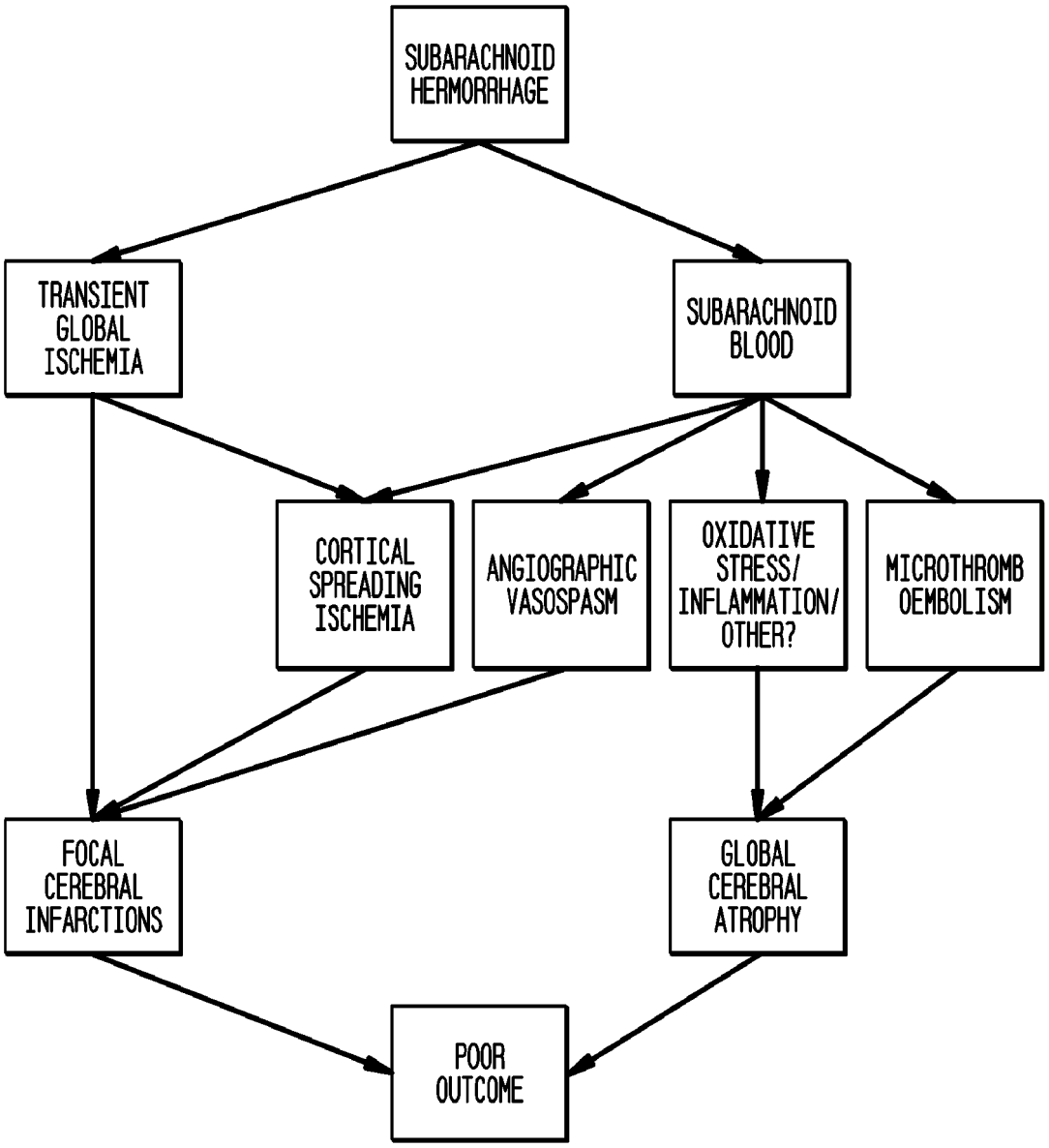
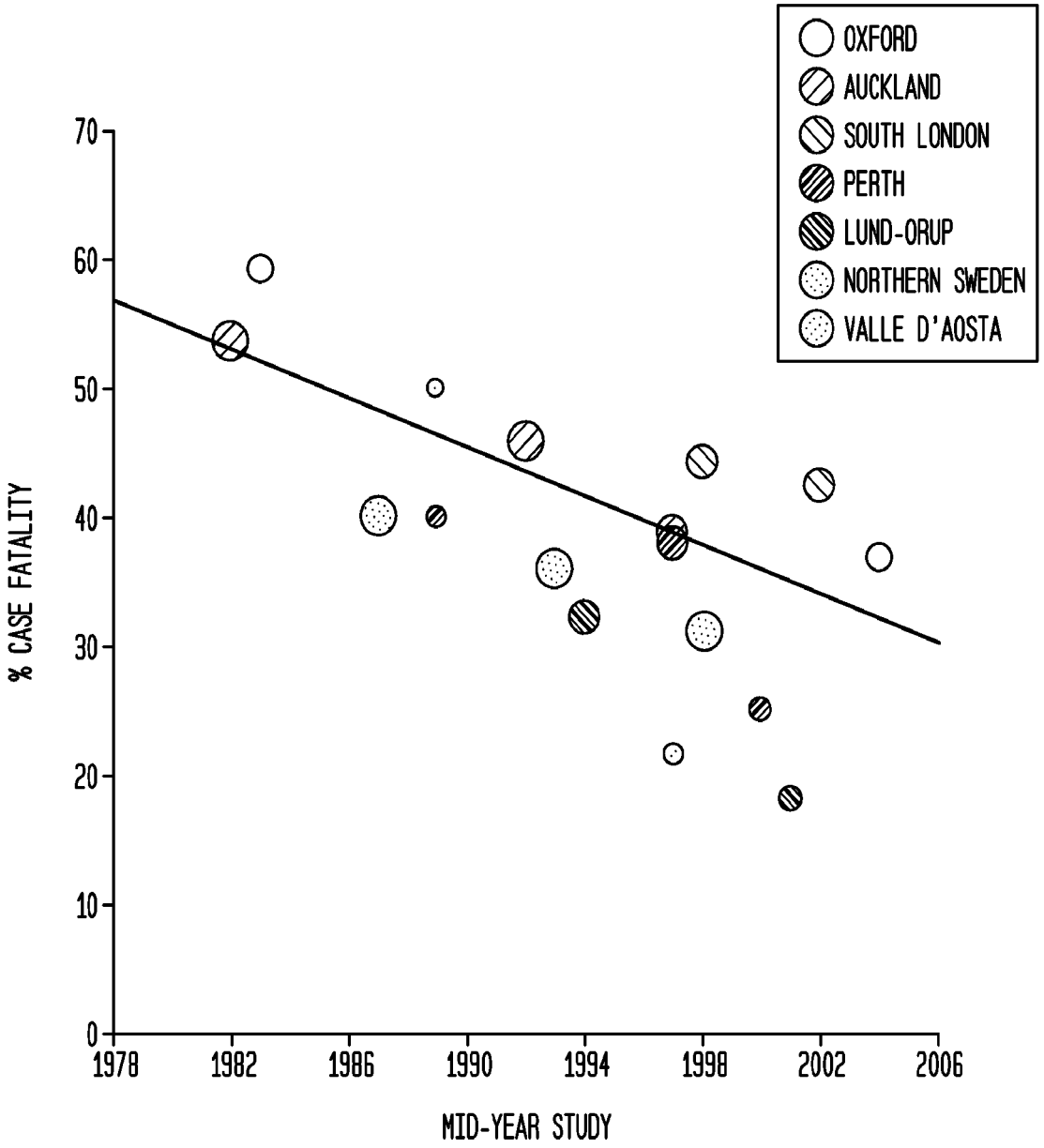


FIG. 11


OXFORD
AUCKLAND
SOUTH LONDON
PERTH
LUND-ORUP
NORTHERN SWEDEN
VALLE D'AOSTA
% CASE FATALITY
0
10
20
30
40
50
60
70
1978
1982
1986
1990
1994
1998
2002
2006
MID-YEAR STUDY

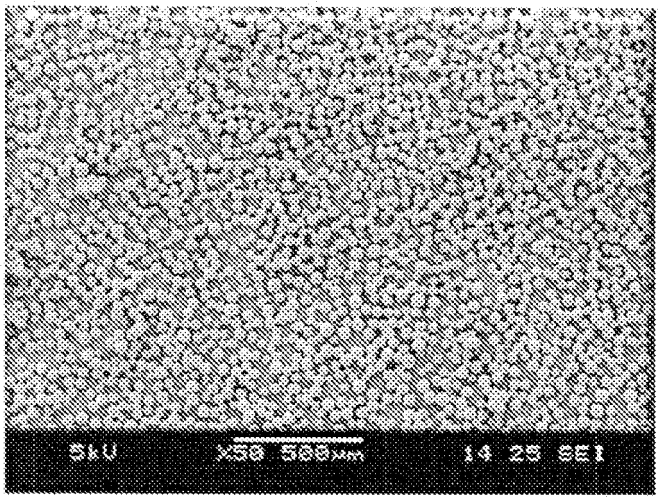


FIGURE 12

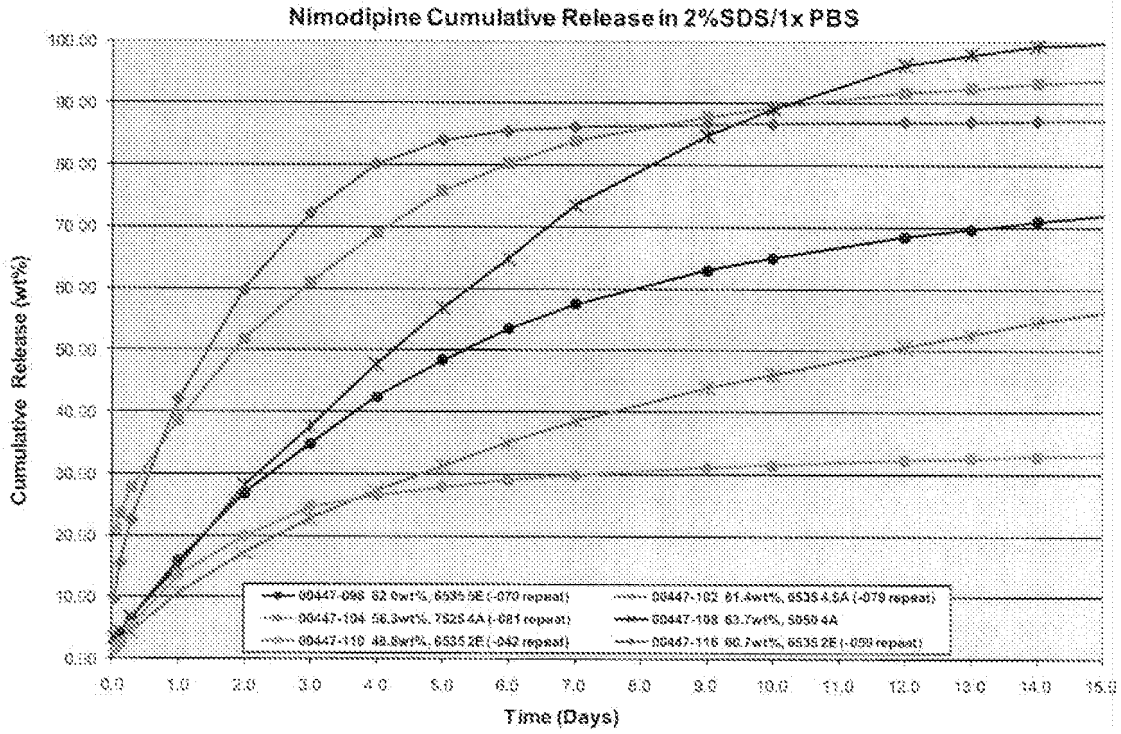

Nimodipine Cumulative Release in 2%SDS/1x PBS
Cumulative Release (wt%)
Time (Days)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0
15.0

FIGURE 13

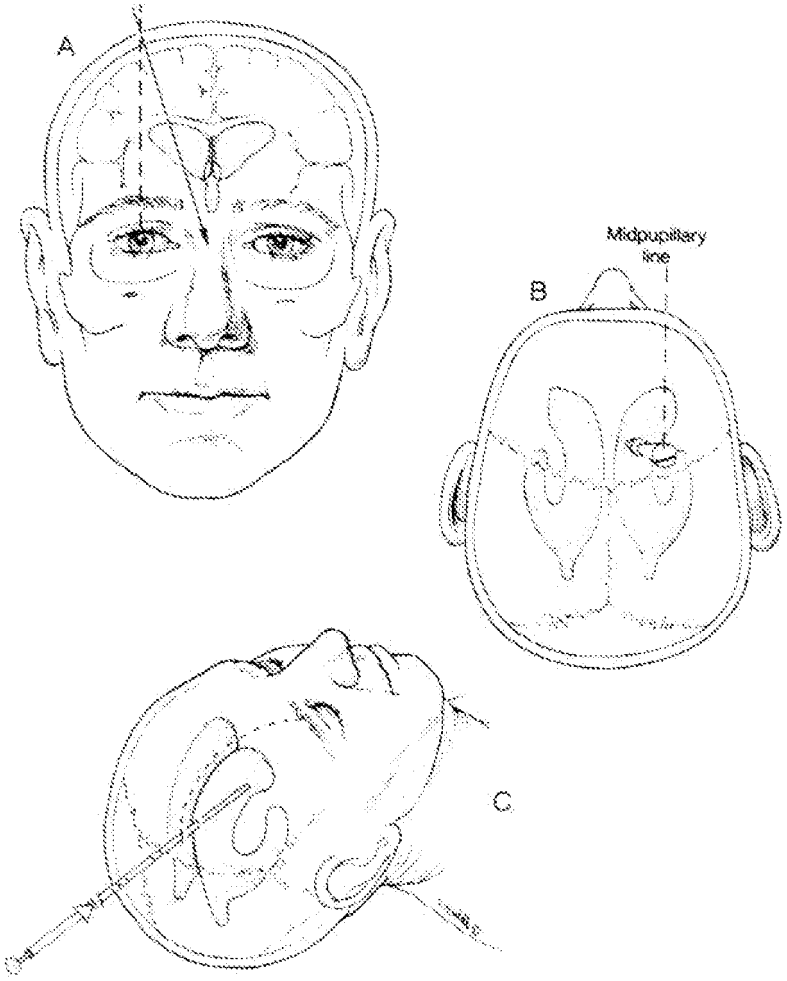


FIGURE 14

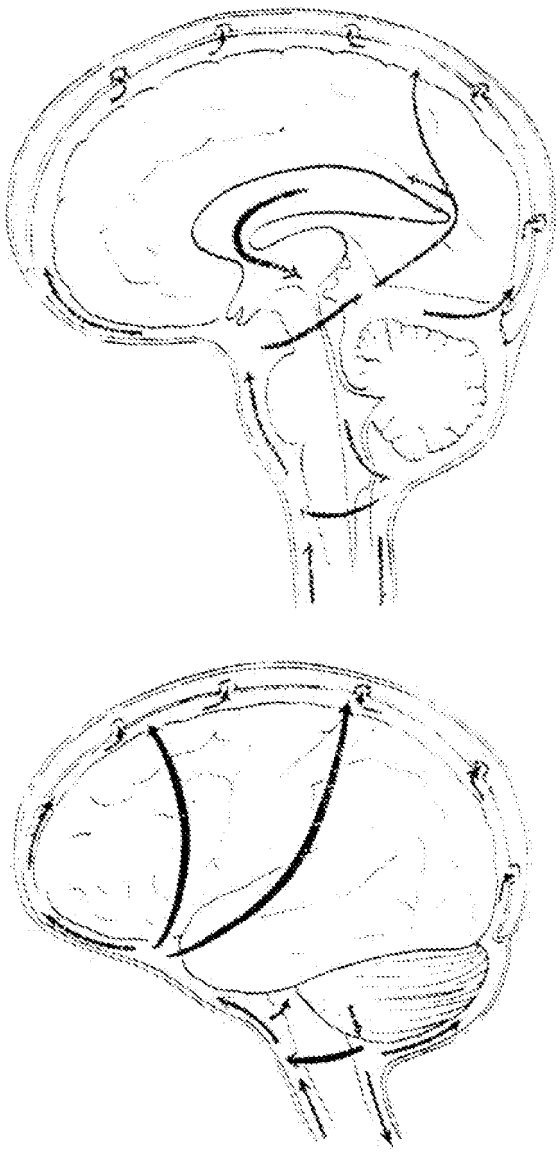
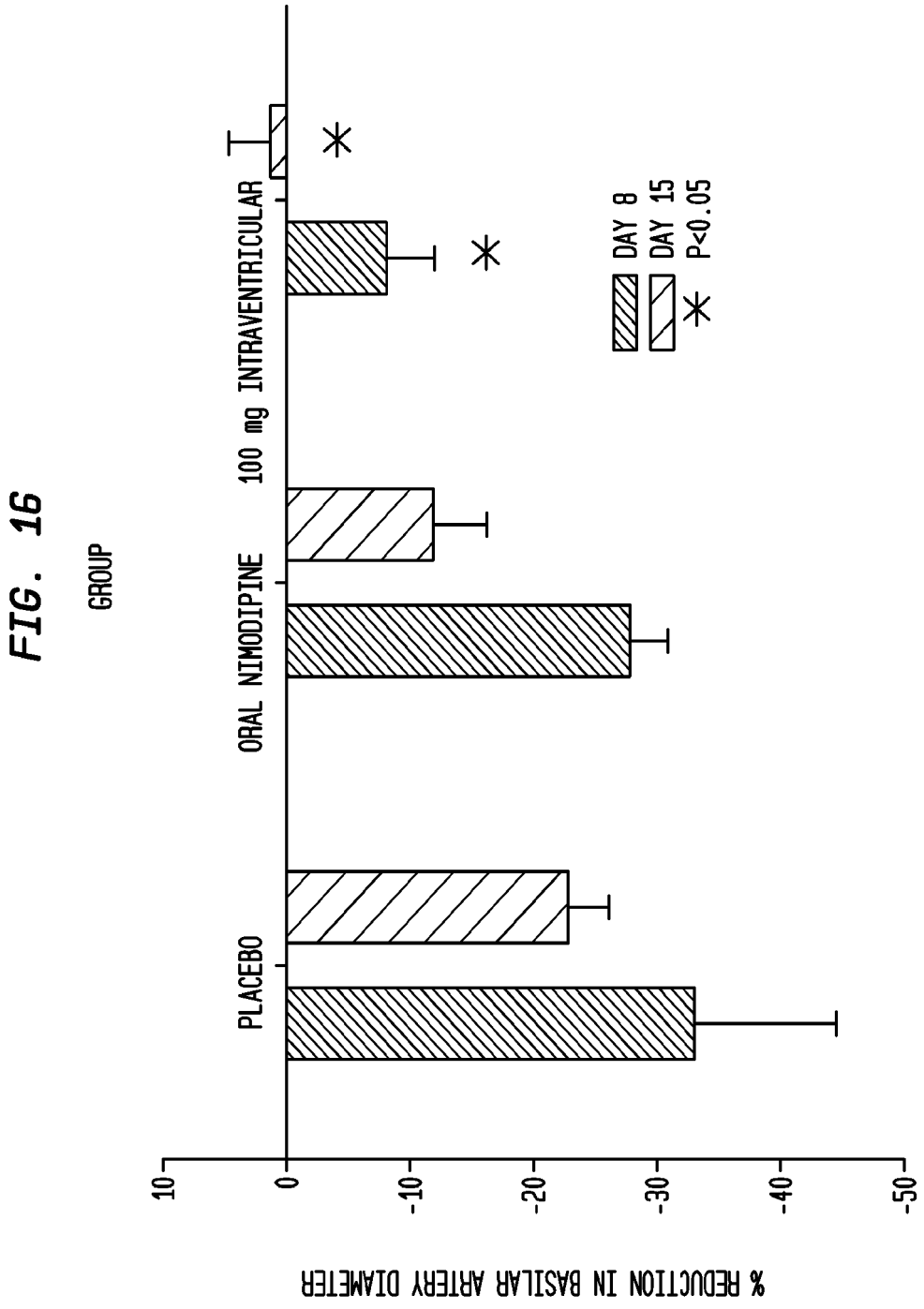


FIGURE 15

FIG. 16


% REDUCTION IN BASILAR ARTERY DIAMETER
10
0
-10
-20
-30
-40
-50
PLACEBO
ORAL NIMODIPINE
100 mg INTRAVENTRICULAR
GROUP
DAY 8
DAY 15
P<0.05

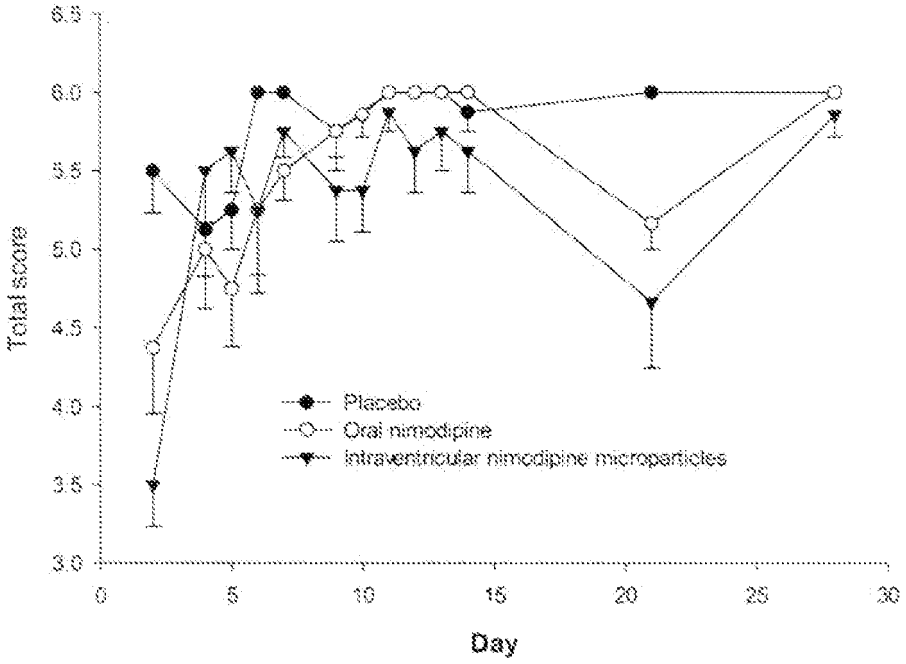

6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
Total score
0
5
10
15
20
25
30
Day
Placebo
Oral nimodipine
Intraventricular nimodipine microparticles

FIGURE 17

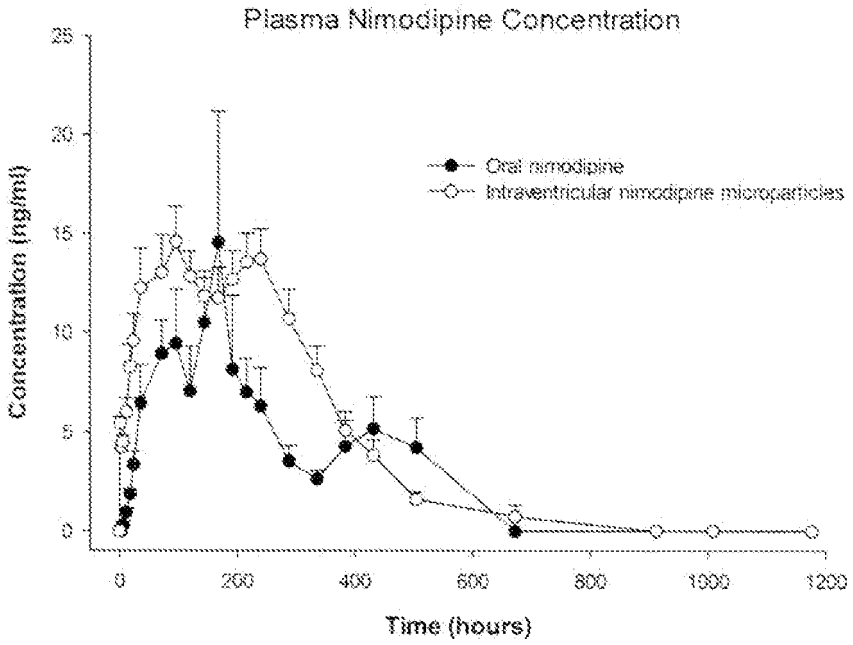

Plasma Nimodipine Concentration
Concentration (ng/ml)
25
20
15
10
5
0
0
200
400
600
800
1000
1200
Time (hours)
Oral nimodipine
Intraventricular nimodipine microparticles

FIGURE 18

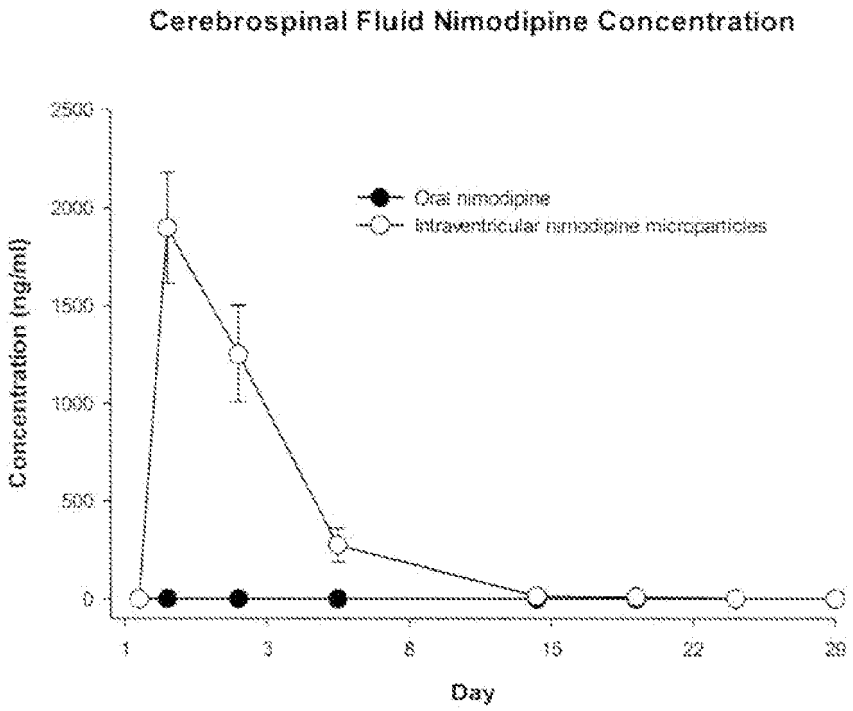
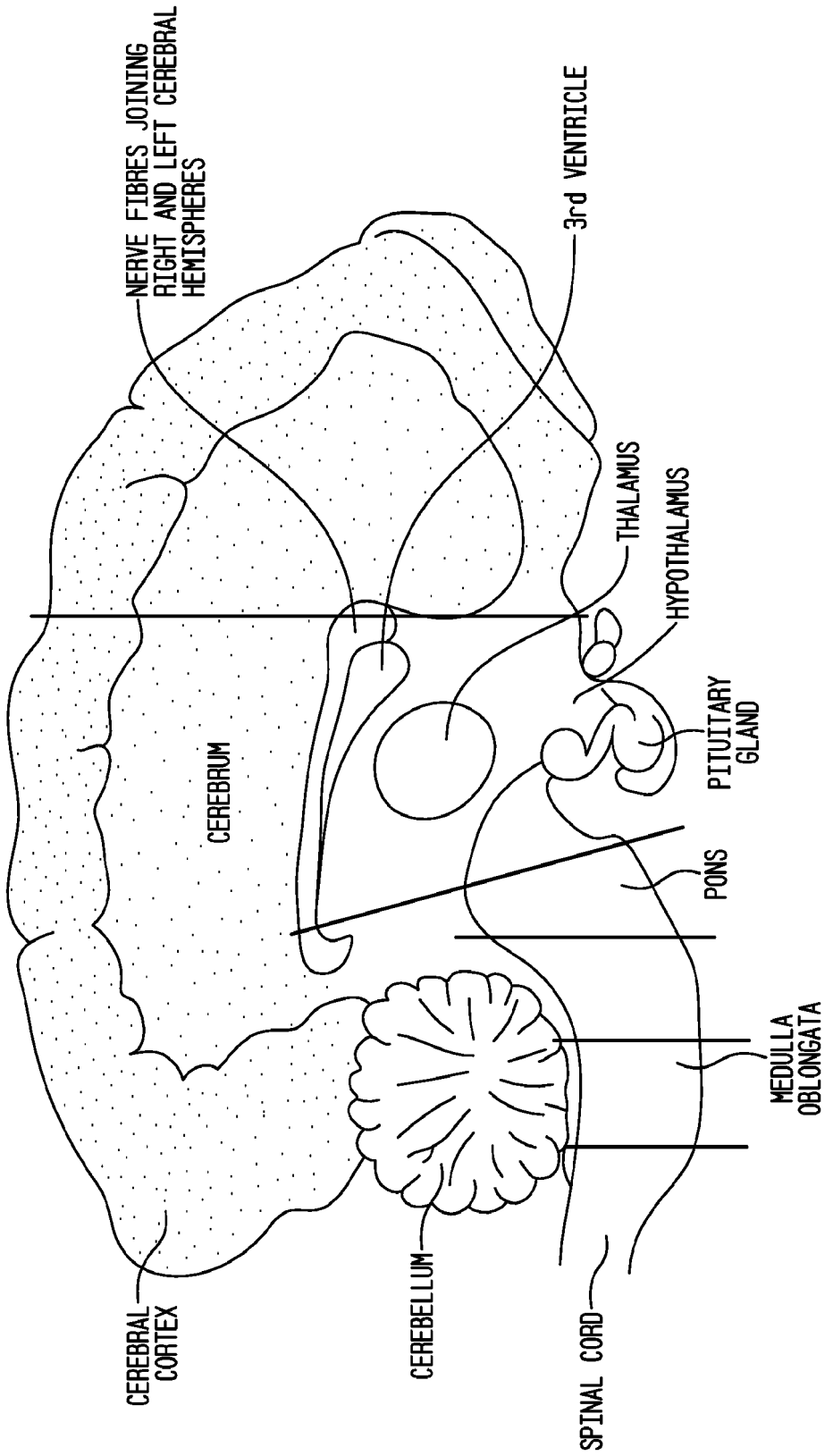

Cerebrospinal Fluid Nimodipine Concentration
Concentration (ng/ml)
2500
2000
1500
1000
500
0
Oral nimodipine
Intraventricular nimodipine microparticles
1
3
8
15
22
29
Day

FIGURE 19

FIG. 20


NERVE FIBRES JOINING RIGHT AND LEFT CEREBRAL HEMISPHERES
3rd VENTRICLE
THALAMUS
HYPOTHALAMUS
PITUITARY GLAND
CEREBRUM
PONS
MEDULLA OBLONGATA
CEREBRAL CORTEX
CEREBELLUM
SPINAL CORD