Health protection in Brazil: the National Sanitary Surveillance System

Abstract This essay presents the singular arrangement named Health Surveillance in Brazil and the specificities of its components: public Health Surveillance, Worker’s Surveillance, Environmental Surveillance, Sanitary Surveillance, as well as the constitutional determination to carry out the actions of sanitary and epidemiological surveillance and Worker’s Surveillance. The two national systems of protection and promote health are also presented - National Public Health Surveillance System and National Sanitary Surveillance System, with an emphasis on the regulatory issues in health made by the latter and some constraints to its action by the Legislative Branch. It reaffirms the Brazilian State’s constitutional duty to protect health, and to provide the means for adequate functioning of the two systems, bearing in mind that defense of the public interest in health products and services means confronting oligopolies of transnational economic interests. This paper states the opinion that the financial constraints facing the Brazilian State from time to time cannot be allowed to prevail over the rights of citizenship, independently of the public underfunding of health in Brazil.

Key words National Sanitary Surveillance System, Regulatory issues in health, Epidemiological Surveillance, Worker’s Surveillance, Environmental Surveillance
Introduction

Development of health systems has to do with considerable involvement of the State in the control of all that affects health. To structure themselves to respond to the problems of health of individuals and the collective, states build structures designed to offer health action for treatment and rehabilitation, prevention of illnesses and disease, and regulation of the production of food, drugs, and goods for health purposes, and provision of safe health care – and protection of the environment and the workers\(^1\).

One of the principal inflections in the Brazilian health system took place with the Health Reform, the high point of which was the 8th National Health Conference, which discussed health as a right, and outlined the country’s future health system. When instituting Brazil’s Unified Health System, Law 8080 of 1990 defined the functions of sanitary surveillance covering regulatory issues in health - food, drugs and quality and safety of health services, epidemiological surveillance and worker’s health surveillance\(^2\). The 1988 Brazilian Constitution (known as the ‘Citizen Constitution’) in line with prevailing trends, in which there is greater protection of health when it is incorporated as a social right, establishes the right to health as a fundamental right; and one of the ways for the State to comply with its duty in relation to the right to health is formulation and implementation of policies to protect health and reduce health risk\(^3\).

The duties of protection that are to be transformed into reality are embedded in the range of health actions. They take concrete form through legal norms that protect as legal goods the rights to life, physical wholeness, environment and public health. It is also important the administrative rules in the field of sanitary surveillance, epidemiological surveillance or public health surveillance, and worker’s health surveillance\(^4\).

Protection of health implies the right of citizenship, and requires activity of nation-states in guaranteeing universal access to health and regulation of what interferes in the population's health, taking into account that health is not a form of merchandise nor a mere subject for achieving profit\(^1\).

Today, all components of health surveillance in Brazil Health System – health products and services, transmissible and non-transmissible diseases, environment and worker’s health – are functions that aim to promote and protect the population’s health. Though built as separate processes, with representation in various institutions, they are defined, by Ministerial Order, as components of the overall health surveillance\(^5\).

This essay aims to discuss Brazil’s two nationwide systems that are dedicated to protection and promotion of health – the National Public Health Surveillance System and National Sanitary Surveillance System. It also highlights the function of health regulation issued by the latter, and restraints placed on them by the activity of the Legislative Branch.

Sanitary, epidemiology and worker’s surveillance as requirements determined by the federal constitution

The group of actions that comprise these surveillance activities deal with risks, or determinant and conditioning factors of diseases and health problems carry out some types of investigation, require laboratory analyses\(^6\), and can be qualified as public goods in health field, which have a high degree of externality. The distinctions between them are due to a group of causes ranging from their unequal development, over time, to their origin at different periods and the differences in their processes of work\(^6\), where the same concept is made operational in different ways, for example, territory and risk. In sanitary surveillance, for example, the concept of territory as context is valid, but in its operation the question of jurisdiction has to be obeyed for the exercise of its power/duty.

These are seen as fragmented, and not as different actions. The recommendation is that they should be integrated, and this has to some extent taken place through the reform of the organization charts of the health bureau of municipalities and states, with the creation of departments where the surveillance activities are grouped, even though there are variations in this between states and municipalities. In some of these municipal or state health departments they may be united in one substructure: health and environmental surveillance; epidemiology and environmental; and workers’ surveillance; or they may be individualized in sectors, and even sometimes grouped with, for example, zoonosis or vector control, or with Primary health care. They are brought together, but not necessarily integrated or sufficiently articulated.

These four components of health surveillance are organized into two national systems: National Public Health Surveillance System and National Sanitary Surveillance System\(^7\). The aim to constitute a single national system for
all components of surveillance in the field of health came up against historical and legal factors, which cannot be left out of consideration, on penalty of losing sight of the key strengths in each – their specificities.

The National Public Health Surveillance System has its origins in the National Epidemiological Surveillance System (NESS), which was formed in the 1970s, and in the National Epidemiological Center, created in 1990, under the National Health Foundation, and transformed into the Health Surveillance Secretariat of the Health Ministry (HSS/HM), in 2003. As from 2000, CENEP also became responsible for the environmental surveillance in health.

The NESS, discussed at the 5th National Health Conference and instituted by law, contained a division of work between the federal and state components, in line with the form of the Brazilian federation at the time. At the end of the 1990s, decentralization of epidemiological activities and control of diseases was begun, including the epidemiological surveillance for municipalities, the state component having only a minimal structure. With the Vigil SIS I Projects (surveillance and control of diseases) and II (modernization of the national health surveillance system), the structuring of the National Public Health Surveillance System was sustained technically and financially.

In the interim, the creation of the HSS/HM – after an unsuccessful attempt to create a federal agency in 2002 – was completed, as from 2003, within the scope of the Health Ministry, the area known as Epidemiology and Disease Control (ECD), which was from that time onward called health surveillance, through bringing together of: actions of: surveillance, prevention and control of diseases; national coordination of programs of prevention and control of diseases; national immunizations program; investigation of and response to outbreaks of emerging diseases of national importance and coordination of the national network of public health laboratories.

The aggregation of prevention and control of diseases with epidemiological surveillance is traditional in Latin America. In 2007 the coordination of the actions relating to workers’ health, which brought together various secretariats and departments of the Health Ministry, became a part of the HSS/HM, inserted into the present Environmental and Worker’s Health Surveillance Department.

The National Sanitary Surveillance System was instituted by the same law that created the Brazilian Health Regulatory Agency, which has the duty of coordinating it. There are challenges in its structure, arising from the nature of its so-called ‘typical activities’, from the complexity of the Brazilian federal regime, and from the need to, being part of the health field, act on technologies and economic activities. The latter functions take on the form of a regulatory practice – which although considered to be social regulation – since it protects the public interest of health – has a strong economic repercussion.

The ‘typical activities’ confer a regulatory character to sanitary surveillance and take the form of: (i) its various rule-making and authorizing activities – market approval, licensing, authorizations; and (ii) inspection and application of sanctions. The performance of these typical activities generates a capacity for intervention, but also generates conflicts.

The workers’ and environmental surveillance, especially when they deal with non-biological factors, show a high potential for generation of conflicts, which is not mitigated by the fact that, constitutionally, the administrative exercise of police power is placed in other ministries. Overall, three of the four surveillance activities are ‘surveillances of real or potential conflict’: related to the process of production-labor (worker’s surveillance); related to the processes of production-consumption (sanitary surveillance); and that of exposure to situations of risk, principally environmental surveillance, in relation to non-biological risks. These surveillances, in contrast to epidemiology, are characterized by the need for a strong inter-sector activity to carry out their actions.

The two nationwide systems were developed unequally, based on conceptions that varied over time – (i) in a first stage, from 1997 to 2006, a conception predominated of health surveillance as public health surveillance, which did not include sanitary surveillance, i.e. a regulation of health risks related to the provision of services and the consumption, production and circulation of goods and products that interfere with the health; and (ii) after 2007, mainly the conception of health surveillance, included sanitary surveillance, mainly integrated into basic healthcare, and subsequently into the healthcare networks. It is essential to approximate the epidemiological surveillance of health care, but the sanitary surveillance may have reduced your regulatory capacity.

It is in this context, in which a restricted health model is being proposed with a financing typical of segmented health systems – where
public spending on health is less than 50% of total spending\(^3\), – and a 20-year freeze on health funding is being proposed by successive Constitutional Amendments as from 2016 – that it is proposed to hold the First National Health Surveillance Conference.

Amid a situation of extreme financial pressure on the State and a realpolitik that has sought opportunities to crumble the national health system, the social security and reduce social rights, an effort is made to establish the National Health Surveillance Policy, giving priority to bringing it together with the healthcare networks, without taking into account that the surveillance activities represent the universal face of the national system. From this system that, except health surveillance, has suffered a process of segmentation and privatization both ‘inside’ and ‘outside’\(^4\) – outsourcing of finalistic activities and management health care.

The policy that has been implemented has not considered that at least three of these surveillance activities require action beyond the healthcare networks, especially when they defend health and public interests, taking into account the conflict between capital and labor, capital and consumption and capital and the environment.

The sanitary and epidemiological surveillance were inscribed among the competencies of the Brazilian health system in the Federal Constitution of 1998 – two years before passage of the law that instituted the Single Health System (SUS) – alongside Workers’ Health, a more recent construction of the Health Reform Movement.

Among other attributions of the SUS, the Constitution lists those related to the surveillance functions. These duties have a gradation that goes from direct execution of actions in epidemiological and sanitary and workers’ surveillance to assistance in the protection of the environment, including the work environment; and adds, in their area of activity, scientific and technological development and innovation\(^5\). This conception, as it was made at the time, reflects the direct responsibility of the health sector, and recognizes its co-responsibility in the duties which, in the Constitution’s design of the structure of the Brazilian State, are under the responsibility of other governmental bodies, for example, water and sewerage services, control of toxic and radioactive substances, environment, and the workplace\(^6\).

The clear constitutional determination, which was not delegated to any enabling law, was not enough to motivate the structuring, in the three levels of government, of the actions and services to make effective all the four components of what came to be called health surveillance in Brazil. Also in the Constitution, it is determined that: health care is a duty that is common to all the federal entities; legislating on the protection of health and the environment is a competency belonging to the federal and provincial level of government; the states have reserved to them the competencies that are not prohibited to them by the Constitution; and the municipalities have the duty of “providing, with the technical and financial cooperation of the federal government and the State, healthcare services to the population”\(^2\).

Coherently, the overall, health law specifies that the municipality is the preferential executor of health actions. As well as defining the surveillance areas: epidemiological, sanitary, and workers’ health surveillance, this law legislated the creation of inter-sectorial committees under the National Health Council (CNS), containing members of the Ministries and competent bodies, and representatives of civil society, for the purpose or articulating policies and programs which involves areas not included exclusively in the health system. The committees appointed in Law 8080: Food and nutrition; Sanitation and environment; Sanitary surveillance and pharmacoepidemiology; Human resources; Science and technology; and Worker’s health\(^2\).

In the 1990s the basic operational rules – different from each other and more or less negotiated between the players of the SUS – instituted automatic and regular financial transfers to the states and municipalities and with them inducements were expressed for carrying out, also, of health surveillance actions. The regular transfers of financing funds were very well received by the managers, but the inducement was combated as a restriction on the autonomy of levels of government. As well as the managers, part of the social movement came out against the allocation of federal financial resources for specific purposes, i.e. against binding budget allocation. Various final reports of Health Conferences contain recommendations to abolish them, and a considerable volume of bibliography was produced on the characterization of this as tutelage or incomplete decentralization\(^7\). For the sanitary surveillance, however, this ‘inducement’ placed sanitary surveillance on the agenda of the municipalities and strengthened the state services.

These conflicts and the move of the emphasis from municipalization of health actions to regionalization resulted in the ‘2006 Pact’. Among other things, it changed the general rules of fi-
nancing of the SUS, aggregating the rules allocated to certain actions into blocks of financing, among which was that of health surveillance, comprising two components: Public health surveillance and Sanitary surveillance. There was a relative loss of the capacity for inducement, not only on the part of Anvisa, but also on the SUS as a whole, and the regionalization of healthcare was not advanced to the degree that had been desired.

A presidential decree was issued on the organization of the national health system, its planning and the assistance to organized health in the health regions, instituted by the federated states, in coordination with the municipalities. These regions were able to be made up of more than one state, and would serve as a reference for distribution of financial resources between the states themselves, provided they contain “primary healthcare actions and services; urgent and emergency services; psychosocial care; specialized outpatient care and hospital care; and health surveillance”. There was however a low level of adhesion to the proposed instrument by the sub-national entity, and the health regions have been structured to unequal degrees, with health surveillance increasingly close to healthcare and increasingly distant from its real (sanitary surveillance) and potential regulatory character (workers’health surveillance and environmental surveillance).

Sanitary surveillance: regulatory activity and constraints on protection of health

Sanitary surveillance is an area of promotion of health and, above all, protection of health. The actions of which have been carried out since the 19th century, changing to adapt themselves to the changes in the economic models and with social development. Four principal functions of health systems are considered to exist: financing; provision of services; management; and regulation – the development of which has been influenced by political and economic relationships, manifesting through the interests of the interests involved with the health systems.

Regulation in health is carried out at three levels of activity – over health systems; over healthcare itself; and in access to healthcare. The first level of activity includes preparation of regulations and verification of compliance with them, through various actions such as: monitoring; inspection; control; and evaluation. The OCDE considers to be an objective of regulatory policy that regulation responds to the public interest, helping to define the relationship between state, citizen and economic interest.

Regulation in the form of sanitary surveillance is carried out through the National Sanitary Surveillance System (SNVS), by Brazilian Health Regulatory Agency (Anvisa) and by state and municipal sanitary surveillance services, with the help of official laboratories. It is justified by the very well-known need to counterbalance the failings that exist in the health market, especially in relation to: 1. Non-rationality in the consumption of health goods and services; 2. Possibility of adverse events occurring as a result of consumption of goods and provision of health care; 3. The consumer’s incapacity to choose between the options available, because he does not know the market; 4. Decision on consumption of health goods and health care intermediated by health professionals; and 5. Existence of oligopolies or monopolies of companies, which results in the establishment of prices without the presence of competition.

The regulation of sanitary surveillance is, in the final instance, a duty of protection of health, through State intervention, that aims to impede possible damages or risks to the health of the population and to provide safety to the population. At the same time, due to productive sector’s characteristic, even if in a secondary manner to regulation by sanitary surveillance, effects are produced in social and economic development of the country through regulations, control and inspection.

This regulatory character was emphasized with the creation of Anvisa as a social agency. In this context, the National Sanitary Surveillance System have an important responsibility in the balance between economic and health interests. When considering the interests involved in production and consumption of health goods and the existence of market failings, sanitary surveillance becomes a key component in protection of health and in the establishment of ethical relationships between production and consumption. The regulatory agencies, in Brazil, were created with administrative, financial and technical autonomy, and their purposes, as well as correction of market failings, include: monitoring of the relevant economic agents; guaranteeing of the effectiveness of the State’s public policies; the issuance, and monitoring of compliance of specific legislation and other regulatory actions.

The regulation carried out by Brazilian Agency (Anvisa) is of importance for the structuring
of the Brazilian Unified Health System, because its actions have an impact on the development of productive sectors, on the regulation of industries, on prevention of risks to the health population and on the organization of the health market. However, the creation of this federal agency took place in the midst of the reform of the Brazilian state, in the 1990s, under the aegis of neo-liberalism. In this context, the characteristics of the State as regulator, as well as liberalization of the economy and reduction of social rights, include the privatization of public services and deregulation – the latter bringing with it a paradoxical combination with regulation, expressed in the limitation of regulation in certain situations, or in less rigid regulation.

The Sanitary Surveillance System has the function of social regulation, and also the duty of exercising its function making efforts on behalf of quality of the goods and services offered to contribute to improvement of quality of life of the Brazilian population and to ensure the right to health as a fundamental right, as stated in our Federal Constitution. For the defense of life and citizenship, it needs to place itself alongside the collective interest, acting to minimize the imbalance between production and consumption of health goods and services, where the more fragile side is the consumer, that is to say, its regulation should be carried out in defense of the interests of public health.

This State function has not, however, been carried out easily because it is a permanent source of conflict. The economic interest finds an echo in distinct sectors of society and exercises a strong influence and pressure on the activity of the SNVS. The conflict between the sanitary interests and economic interests has been expressed in various ways in these years, since the creation of Anvisa – and to say that is to refer only to the federal sphere of the SNVS.

In the more general scope, three studies contributed to this debate. Authors showed the deficit of transparency, in the online mechanisms of consultation, in reports of public consultations of the Supplementary Health and Brazilian and Health Regulatory Agencies and the National Technologies Incorporation Committee in Health Ministry, and the need for standardization of the data presented in the reports to these institutions.

The analysis of the contractualization between Anvisa and the Health Ministry indicated the importance of the phase referred to as ‘legitimation in relation to the productive sector’ (2001–2004), with emphasis on ‘satisfaction of the direct clients’, the kernel of which is in the reduction of the period of analysis for serving the demands of the productive sector, and not necessarily to the benefit of public health interests.

In the analysis of Anvisa’s Consultative Council as a space for political participation, from 2000 to 2010, it was considered a space with restricted participation, used principally to the benefit of the private interests, with a more bureaucratic than democratic activity. Also, the distancing from the CNS, and the low degree of coordination, was highlighted.

In the specific scope, some examples that reflect the fragility of public health interests against the economic interests are shown in the pressure for ‘flexibilization’ of the health regulation, which goes beyond the SNVS and involves other government bodies, such as the Office of the Attorney General (AGU), and even Congress. There is pressure to shorten the time for market approval of new medicines and for evaluation of clinical trials, or for market approval of medicines considered unsafe or ineffective by Anvisa. Note also that this evaluation is carried out by a qualified technical team and by the Medicines Technical Chamber of Anvisa (Cateme), a consultative committee made up of external specialists, with the purpose of advising Anvisa on medicines market approval procedure, especially in relation to their efficacy and safety.

It is possible to state some examples where regulation took place with the support of democratic participation instances of the SUS, an important part of the scientific community, and often, consumers, with technical justification and in the view of public health – but has encountered difficulties for realization. The National Health Council, after 2007, made movements in defense of the activity of Anvisa, especially on controversial subjects, most of them related to regulation of the large transnational corporations – pesticides, medicines promotion, children’s foods promotion, medicines commercialization – and some in relation to local interests such as the control of antimicrobial agents.

Two cases – one of an interest of large corporations (regulation of food advertising) and the other concerning more local interests (anorexigen agents) involve questions of interest to Public Health and to protection of health, in which the final result benefited the interest of the sector being regulated and not the interest of public health.

Childhood obesity is considered an important problem of public health. The high con-
sumption of salt by children, which also favors high blood pressure, and healthy diet have been themes of discussion by specialists in the fields of nutrition and public health in the national and international arenas. The CNS has put forward motions on the subject and also promulgated CNS Regulation 408, of December 11, 2008, which approved directives for promotion of healthy eating, with an effect on reversal of the epidemic of obesity and prevention of chronic non-transmissible diseases.

Some directives relate directly to regulation actions of Anvisa – the following: 1. Requirement for nutritional labelling of foods to state the levels of saturated fats, trans fats, total fats, sodium and sugar; 2. Regulation of advertising, marketing and information on foods directed to the public in general and to the public of children, restraining excessive practices that induce this public to consumption patterns that are incompatible with health and violate their right to appropriate diet; and 3. Regulation of the marketing of foods to the infantile public, with times of day for airing of advertising, prohibition on the offer of gifts to induce consumption, and the use of phrases warning of the risks of excessive consumption.

One important activity is the social regulation and control of advertising for foods and beverages, especially those considered to have a high level of sodium and fats. Since 2005 Anvisa has faced resistance by part of the productive sector in the group that was instituted to discuss regulation on food advertising, even prior to the Public Consultation N° 71 of 2006 being made available.

Baird analyzed the political action of interest groups during the regulation of Anvisa on food advertising, from the Public Consultation up to the publication of Resolution 24/2010. Anvisa received 789 contributions to the Public Consultation. The regulated sector presented documents, the main arguments of which included the following aspects: (i) The argument that Anvisa did not have the competency to legislate on advertising; (ii) free expression of thought, expression and information; (iii) falling GDP and increase of unemployment; (iv) the argument that tutelage by the State violates freedom of choice; and (v) lack of scientific basis, on the grounds that, for the regulated sector, no food that is sold is actually bad – there are only healthy or unhealthy diets. The public hearing took place after two and a half years, and Committee Board Resolution (RDC) No. 24 was subsequently published on June 29, 2010.

The productive and the advertising sectors activated both Congress and the Office of the Attorney General, which recommended suspension of that RDC. In Congress, Draft Degree (PDC) 2830 was proposed, which aimed to make the RDC unconstitutional. Baird reports 11 court actions, seven with judgments in favor of the industry and three in favor of Anvisa at the first instance. In Anvisa, also according to this author, Ministerial Order 422 of March 16, 2012 changed the structure of the area, weakening the sector that dealt with advertising policy, and a director whose position was aligned with the productive sector was appointed.

Aith and Dallari analyzed the controversy relating to the Anvisa RDC nº 52/2011 that prohibited the use of anfepramone, fenproporex and mazindol, in harmony with the regulatory actions of Europe and the United States, and the debates held in the Brazilian Congress. This regulation took place in a way that was much discussed with society and on a robust technical-scientific base, which had justified the withdrawal of these medicines from the markets of leading developed countries, in view of unfavorable risk/benefit ratio.

The cancellation of the market approval of these medicines was recommended to Anvisa by specialists of its CATEME; and reinforced by public consultations and public hearings with support from part of the scientific community, and from consumers (e.g. the Consumer Defense Institute and the Brazilian Medicines Surveillance Society). The use of anfepramone, fenproporex and mazindol was prohibited in 2011. Pressures from endocrinologists and the pharmaceutical retail sector, especially the compounding pharmacies, led to the holding of a public hearing in Congress and approval of Law 13454, of June 23, 2017. The approval of this Law, which annulled the effects of RDC 52/2011, according to those authors, compromises the mechanism of direct democracy.

The authors also considered that the case of RDC 52/2011 lays bare the traditional control carried out by the Legislative Power. But there is a need to go beyond these traditional controls between the powers and amplify the participation of society in the preparation of legal regulations in health, and for this reason the democratic experience of preparation of RDC 52/2011 should be given value. The formal mechanism of separation of powers cannot ignore “the carrying out of a public consultation (direct democracy) and the technical report of a specialized body (rep-
representative democracy). The tension between the Executive and the Legislative in production of regulations in health is inherent to the juridical system currently in effect. For this tension to be transformed into a social pact for the protection of the right to health, the way forward is to achieve deeper democracy in health. Recognition of health as a fundamental human right and the creation of mechanisms for participation of society in the decisions of the State, including decisions on regulations, are fundamental grounds for democracy in health matters.

The constitutionality of the recent law is being challenged, since it extrapolates the competencies of Congress to make regulations. Democracy in health surveillance – desired, and inconclusive – has been under a strong threat, also from the Legislature, in these difficult times.

Final considerations

It is necessary to affirm that the Brazilian State has the constitutional duty of health protection and of providing means for good functioning of the two national systems that organize action of the four types of surveillance in the field of health. This is true in particular in relation to the National Sanitary Surveillance System, which, aiming to achieve safety in food and drug, equipment and health care, and protect health of the Brazilian population and not the productive sector, faces up to oligopolized transnational economic interests. The argument that the Brazilian state is in financial difficulties cannot be allowed to prevail over the population’s right, and the constitutional duty, for protection of health, in the context of the public underfinancing of health.

The activity of the Legislative Branch to restrain the regulatory action of Brazilian Health Regulatory Agency needs to be better known, more widely disseminated and debated; and this Power should be more attentive to the positions taken by the Health Councils, and avoid placing itself against health regulation that has technical legitimacy and has been supported by the democratic instruments of popular participation.

The National Health Council could contribute to greater effectiveness in protection of health. However, in 2015, the Inter-sectorial Sanitary Surveillance and Pharmaco epidemiological Committee (CIVSF), created by Law 8080/1990, was transformed into an Inter-sectorial Health Surveillance Committee. At the same time, the Inter-sectorial Workers’ Health Commission was maintained, and aggregated to the Pharmaceutical Advisory Group to the Inter-sectorial Science and Technology Commission. In this context, it is demanded that the Committee provided for in Law 8080 should be reconstituted.

The functions of surveillance are plural and complex, and need to be developed for greater effectiveness of their actions. Coordinated and articulated action between them is a complex question, which cannot be resolved by simply restructuring organizational charts, but needs the concrete form of cooperation to resolve certain environmental and health problems.

The two national systems also need financial investment, and funds specifically allocated to them so that healthcare – a social demand of great visibility – especially in relation to the medium and high levels of complexity, does not consume their scarce resources, in an adverse situation characterized by binding budget allocation being extinguished, and public underfunding.

Collaborations

MH De Seta, CVS Oliveira and VLE Pepe wrote the first version; MH De Seta and VLE Pepe are responsible for the final version of the manuscript.

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